Myra-Offner Master Plan
Traffic Impact Analysis

595 Offner Road
Walla Walla, Washington

Prepared for:
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Milton-Freewater, Oregon 97862

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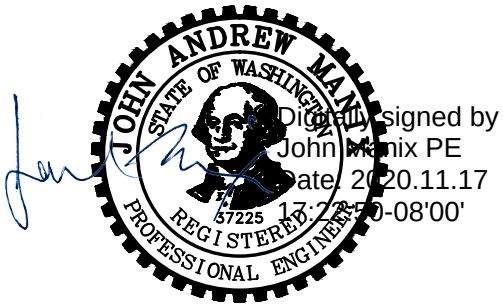
PBS Project 67619.000



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Purpose and Scope

The applicant proposes to develop approximately 49± acres of mostly vacant land into multiple uses that include RV/boat storage, single-family residences, multi-family residences, general commercial uses, a super convenience market with a gas station, and a coffee shop with a drive-through lane. The project site is located within the City of Walla Walla (City) at the northeast corner of the Myra Road / Futura Road intersection. The proposed development is anticipated to be constructed over multiple phases and will be completely built out by the year 2025.

This report analyzes the traffic impacts generated by the completed development as required by the City.

The following intersections were identified for study within this traffic impact analysis (TIA):

1. Myra Road / Heritage Road / Pine Street
2. N 9th Avenue / N 9th Court / Pine Street
3. Myra Road / Futura Road
4. Wallula Avenue / Lambert Avenue / Rose Street
5. Myra Road / Rose Street
6. Offner Road / Rose Street
7. Avery Street / Rose Street
8. N 9th Avenue / Rose Street
9. Myra Road / C Street / Poplar Street
10. Myra Road / Whitman Drive
11. Myra Road / 12th Street / The Dalles Military Road
12. Myra Road / State Route 125 (SR 125)

Findings

The findings of this TIA are listed below.

Present Volumes Are Estimated

Because of the ongoing COVID-19 pandemic temporarily closing schools and multiple businesses, present intersection traffic volumes were estimated based on historical data rather than by counting existing volumes. This approach was agreed to in negotiation with staff from the City and DKS Associates.

Historical data available at study area intersections indicate a growth rate of 2.5% (annually compounded), so for locations where historical data were available, past volumes were increased by 2.5% (annually compounded) to estimate April 2020 volumes.

Comparisons between current counts and present projections (based on 2.5% growth) at select study area intersections indicate the COVID-19 pandemic has depressed volumes by approximately 30% across the study area. So, for locations where historical data were unavailable, current counts were increased by 30% to estimate April 2020 volumes.

To apply a level of uniformity to the study, intersection approach volumes were balanced along the Myra Road and Rose Street corridors, using the estimated April 2020 volumes at the Myra Road / Rose Street intersection as a fixed reference. These balanced volumes and the unadjusted volumes at isolated intersections were used as the 2020 baseline volumes for this study.

Future Traffic Volumes Increase
Traffic volumes in the study area will continue to increase without or with the project. Generic background growth (at 1% for 5 years) was assumed to add approximately 5.1% to the 2020 baseline volumes to estimate 2025 Without Project volumes. Generic background growth (at 1% for 20 years) was assumed to add approximately 22.0% to the 2020 baseline volumes to estimate 2040 Without Project volumes.

Access and Circulation
Futura Road, Offner Road, and Avery Street are assumed as the three access points into and out of the site. An internal local roadway network will be developed to serve the various uses proposed. Pedestrian connections will be provided between the public rights-of-way and the proposed development. The Myra-Offner Master Plan will support the future extension of Electric Avenue to Offner Road with right-of-way dedication and improvements.

Trip Generation
Including all land uses and all development phases, the Myra-Offner Master Plan is anticipated to generate 438 net new vehicle trips during the AM peak hour and 358 net new trips during the PM peak hour. In addition, the Myra-Offner Master Plan is anticipated to generate 74 internal trips and 227 pass-by trips during the AM peak hour, and 86 internal trips and 134 pass-by trips during the PM peak hour.

Peak Hour Signal Warrant
The peak hour signal warrant was not met at the Myra Road / Futura Road intersection in the 2040 With Project conditions for either the AM or PM peak hour.

Intersection Operations
In all analysis scenarios, both without and with project conditions, all except one studied intersection will operate at an acceptable LOS during both the weekday AM and PM peak hours. The exception is the Myra Road / Futura Road intersection, which will operate at LOS F for westbound left-turn lane in the 2040 With Project scenario during the AM peak hour. This intersection fails due to background growth on Myra Road. Alternate routes (Offner Road in the near term plus Electric Avenue in the long term) are available, and signal warrants are not met, so no mitigation is not required or recommended.

The completion of the Electric Avenue from Myra Road to Offner Road. will reduce the traffic volume of left turns from westbound Furtura Road.

Volumes on Adjacent Collector and Local Roadways
Trips generated by the Konen Myra-Offner Master Plan will impact Offner Road and Avery Street with increases ranging from 15% to 392%. Two segments meet or exceed the City's 25% threshold for recommending mitigation measures: Offner Road north of Rose Street and Avery Street north of Rose Street.

Left-Turn Lane Evaluations
Eastbound Rose Street will meet the criteria for further consideration of a left-turn lane at both Offner Road and Avery Street based on the 2025 With Project conditions. Left-turn lanes are expected to be incorporated within a future lane conversion improvement along Rose Street, and proportionate contributions by the Myra-Offner Master Plan projects are appropriate. For the affected segments of Rose Street, the project impacts on the corridor's left-turn lanes represent 6.0% at Offner Road plus 5.5% at Avery Street.

Right-Turn Lane Evaluations

Although the Myra Road / Futura Road intersection volumes from the 2025 With Project meet the Washington State Department of Transportation (WSDOT) criteria to consider a northbound right-turn lane, no other factors recommend its implementation. No right-turn lanes are recommended with the project.

Collision Analysis
The 2014–2019 collision history at the study intersections was reviewed; all intersections have collision rates lower than the critical rate. The Poplar Street corridor project (currently in the design phase) and the recently completed improvement projects at the N 9th Avenue / Rose Street intersection should address the locations with the most notable crash history. The Myra-Offner Master Plan project will have minor impacts on any of the studied intersections.

Transit, Pedestrian, and Bicycle Facilities
Sidewalks, bike lanes, and off-street paths are available along several roadways within the study area. Current pedestrian infrastructure has gaps along Offner Road and Avery Street between the Konen site and Rose Street, most notably at the Columbia-Walla Walla Railway crossings. To fill in these gaps, the project impacts on the Offner Road pedestrian rail crossing represent 99% of its cost. The project impacts on the Avery Street sidewalk and pedestrian rail crossing represent 100% of their cost.

The development will construct new pedestrian and/or bicycle facilities along internal streets, connecting to current facilities where they exist and anticipating future connections.

No pedestrian improvements are necessary currently at the Myra Road / Futura Road intersection, but if traffic volumes increase along Myra Road, then additional improvements are suggested.

Crossing Rose Street at Offner Road or Avery Street is considered a moderate risk for pedestrians, and pedestrian traffic is likely to increase with the Konen site developments. The City's programmed multimodal improvements are expected to include restriping Rose Street to a three-lane cross section, which will significantly reduce risk for pedestrians. The risks may be further mitigated by construction of curb ramps and median refuge islands within Rose Street at the two intersections. The Konen project impacts represent 81% of the improvement costs at Offner Road plus 79% of the improvement costs at Avery Street.

Intersection Sight Distance
Adequate ISD is available on the stop-controlled approaches at the three access intersections: Myra Road / Futura Road, Offner Road / Rose Street, and Avery Street / Rose Street.

Recommendations
The traffic impact analysis supports the following recommendations.

Traffic Impact Mitigation
Negotiate acceptable mitigation improvements for Offner Road and Avery Street with City staff. This report recommends proportionate share contributions, as described below, to address the project impacts.

*T*he full roadway width of right-of-way should be dedicated for the extension of Electric Avenue from Offner Road to the western property line of the site.

Left-Turn Lanes on Rose Street
Contribute to the Rose Street corridor lane conversion project: either $130,300 if plastic pavement markings are selected or $60,100 if the paint pavement markings are selected.

Collision Mitigation
The City of Walla Walla should continue to monitor crash records at the Myra Road / C Street / Poplar Street intersection and should review the traffic signal timing parameters to assure they minimize the risk of rear-end collisions.

Pedestrian Safety Connections Along Offner Road and Avery Street
Contribute $8,000 toward connecting the pedestrian pathway connection along Offner Road across the Columbia-Walla Walla Railway crossing.

Contribute to completing the pedestrian connection along Avery Street between the Konen site and Rose Street, including across the Columbia-Walla Walla Railway: $33,800 for the sidewalk plus $8,100 for the pedestrian rail crossing.

Accessibility
Assure all driveways, sidewalks, and curb ramps constructed with the development projects comply with current Americans with Disabilities Act (ADA) guidelines.

Pedestrian Crosswalks of Myra Road at Futura Road
Future development projects adding trips to Futura Road should monitor the LOS operations and signal warrant thresholds at Myra Road / Futura Road intersection. The City should pursue the completion of the Electric Avenue from Myra Road to Offner Road.

Pedestrian Crosswalks of Rose Street
The City should design and construct two curb ramps and a pedestrian refuge island at the Offner Road / Rose Street intersection and at the Avery Street / Rose Street intersection as part of the Rose Street corridor improvements project. The Konen project should contribute on a proportionate share basis, totaling $24,000.

Intersection Sight Lines
Design the proposed internal roadway network, intersections, and site accesses in accordance with guidelines presented in Chapter 9.5 of the American Association of State Highway and Transportation Officials (AASHTO) *Geometric Design* policy (see References) for intersection sight distance (ISD). Install no objects within the ISD triangles that would block approaching drivers' views of approaching traffic.

Pedestrian Crosswalks of Myra Road at Futura Road
Continue to monitor the Myra Road / Futura Road intersection for increasing pedestrian activity crossing Myra Road. If pedestrian activity increases, then install advance stop bars and warning signs on Myra Road.

Pedestrian Crossings of Rose Street
Within the City's corridor study, Rose Street should be considered for a lane conversion to reduce the roadway cross section from four undivided lanes to three vehicles lanes and bike lanes.

Intersection Sight Lines
Design the proposed internal roadway network, intersections, and site accesses in accordance with guidelines presented in Chapter 9.5 of the AASHTO *Geometric Design* policy (see References) for ISD. Install no objects within the ISD triangles that would block approaching drivers' views of approaching traffic.

1 INTRODUCTION

The purpose of this study is to determine the traffic impacts generated by the Myra-Offner Master Plan project on the surrounding roadway infrastructure. The project site is shown on the vicinity map (Figure 1). The project site plan is shown in two parts for two different ownerships: Figure 2A presents the larger northern portion controlled by the Konen group, and Figure 2B presents the smaller southern potion proposed as the Avery Estates subdivision.

This study will determine if mitigation is required to keep the roadways operating safely and at capacity levels acceptable under the current level of service standards. This report documents the findings and conclusions of a traffic impact analysis (TIA) conducted for the proposed master plan application for property located in Walla Walla, Washington (City).

1.1 Scope of Study

This study documents the existing and proposed conditions, traffic data, safety analysis, and intersection operations in accordance with the requirements of the City's *TIA Guidelines* (see References).

The following intersections were identified for analysis:

1. Myra Road / Heritage Road / Pine Street
2. N 9th Avenue / N 9th Court / Pine Street
3. Myra Road / Futura Road
4. Wallula Avenue / Lambert Avenue / Rose Street
5. Myra Road / Rose Street
6. Offner Road / Rose Street
7. Avery Street / Rose Street
8. N 9th Avenue / Rose Street
9. Myra Road / C Street / Poplar Street
10. Myra Road / Whitman Drive
11. Myra Road / 12th Street / The Dalles Military Road
12. Myra Road / State Route (SR) 125

This TIA includes analysis of future background conditions growth based on an assumed 1.0% annually compounded growth rate and no addition of traffic from in-process projects.

This TIA is prepared for submission to the City of Walla Walla. The traffic-related issues addressed in this report include:

- Existing traffic conditions
- Proposed site-generated traffic volumes and their distribution
- Build-out year (2025) conditions without and with the project
- Planning horizon year (2040) conditions without and with the project
- Capacity analysis of the existing and future conditions for weekday AM and PM peak hours
- Safety analysis of the existing and future conditions
- Recommendations for mitigation of traffic impacts and conclusions

Note that it was determined during the TIA scoping process that only three of the study area intersections were required to be evaluated during the weekday AM peak hour conditions. These three intersections are the access points for the development where the most turning movements are expected to be added. The three

were the Myra Road / Futura Road, Offner Road / Rose Street, and Avery Street / Rose Street intersections, numbered 3, 6, and 7, respectively, above.

1.2 Existing Site Conditions

The existing site spans approximately 0.1 mile along the east side of Myra Road between Mill Creek and Futura Road. It includes contiguous properties to the southeast that border Offner Road and Avery Street north of Rose Street. The existing site is mostly undeveloped except for a few single-family residences. Most of the site is zoned "UPC Urban Planned Community," with the remainder zoned "RN Residential Neighborhood," and it is surrounded by a variety of land uses, as described below. The specific tax lot numbers included in this evaluation are:

- 350724440024
- 350725110028
- 360730220029
- 360730220010
- 360730220030
- 360730220014
- 360719330031
- 360719330030
- 360730220031

1.3 Existing Infrastructure

The existing infrastructure and operational traffic conditions in the study area were documented. Roadway conditions were studied to confirm that the roadway is currently operating in a safe and efficient manner.

1.3.1 Land Uses

The land uses surrounding the site are documented to help identify the site location and provide reference for any discussion of conditions that might impact the adjacent properties. The land uses surrounding the site are shown in Table 1, below.

Table 1. Land Uses Around the Site

North of Site	
Zoning	CH, RN, IL
Description	Highway Commercial, Residential Neighborhood, Light Industrial/Commercial
Existing Use	Hotels, Commercial Lots, and Undeveloped Land

West of Site	
Zoning	CH, PR
Description	Highway Commercial, Public Reserve
Existing Use	City of Walla Walla Wastewater Treatment Plant and Undeveloped Land

SITE

East of Site	
Zoning	RN, IL, IH
Description	Residential Neighborhood, Light Industrial/Commercial, Heavy Industrial
Existing Use	Medical Center, School District Facilities & Support, and Other Industrial Lots

South of Site	
Zoning	CH, RN
Description	Highway Commercial, Residential Neighborhood
Existing Use	Commercial and Residential Lots

1.3.2 Existing Roadways

The existing major arterial roadways providing access to the site are Myra Road and Rose Street. Data were gathered on these and other roadways in the study area to inform operations analysis of the existing roadway system. The pertinent information regarding the study area roadways is tabulated in Table 2.

Table 2. Existing Roadway Information

Roadway Name	Classification	Speed Limit (mph)	Lane Configuration		
			Lanes	Sidewalks	Bike Lanes
Myra Road	CoWW: Major Arterial CoCP: Minor Arterial WSDOT: Urban Minor Arterial	35	4 or 5[e]	Yes	Yes[i]
Heritage Road	CoWW: Major Arterial	40	2	No	Yes
Pine Street	CoWW: Freeway/Expressway[a] CoWW: Major Arterial[b] WSDOT: Urban Other Principal Arterial	30	2	Yes	No
Rose Street	CoWW: Major Arterial	35	4	Yes	No
9th Avenue	WSDOT: Urban Other Principal Arterial	30	2	Yes	No
9th Court	CoWW: Local Street	25	2	Yes	No
Futura Road	CoWW: Local[f] CoWW: Collector[g]	25[h]	2	Partial	No
Offner Road	CoWW: Collector	25	2	Partial	No
Avery Street	CoWW: Local Street[c] CoWW: Collector[d]	25[h]	2	Partial	No
Poplar Street	CoWW: Major Arterial	35	4	Yes	No
The Dalles Military Road	CoWW: Major Arterial	35	2	Yes	No
Wallula Avenue	CoCP: Minor Arterial	35	2	Partial	No
Lambert Avenue	CoCP: Major Collector	25	2	Partial	No
C Street	CoCP: Minor Arterial	25	3[e]	Yes	No
Whitman Drive	CoCP: Minor Arterial	30	3[e]	Yes	No
12th Street	CoCP: Minor Arterial	35	2	Yes	No
SR 125	WSDOT: Urban Other Freeways/Expressways	55	4	No	No

mph = miles per hour, CoWW = City of Walla Walla, CoCP = City of College Place, NA = not applicable, WSDOT = Washington State Department of Transportation

[a] From Myra Road to east of 9th Avenue

[b] From 9th Avenue to east of 2nd Avenue

[c] North of Rose Street to end of roadway

[d] South of Rose Street to Poplar Street

[e] One lane represents the two-way left-turn lane or median

[f] This TIA assumes Futura Road, east of Myra Road, will have a functional classification of a local street.

[g] West of Myra Road to end of roadway

[h] Speed limit not posted. Speed limit assumed based on other roadways in the study area with similar functional classification.

[i] Bikes are accommodated on a wide sidewalk or detached path along the east side of Myra Road.

1.3.3 Major Intersections and Traffic Controls

For each of the intersections being evaluated in the study area (listed in the scope of study, above) essential information relevant to the intersection operations analysis was gathered. Table 3 presents the existing geometrics and traffic controls at the study intersections.

Table 3. Major Intersections: Existing Lanes and Traffic Controls

Intersection	***Myra Road / Heritage Road / Pine Street***			
Leg	**NB**	**SB**	**WB**	**EB**
Control	Yield	Yield	Yield	Yield
Number of Lanes	2	2	1	1

Intersection	***N 9th Avenue / N 9th Court / Pine Street***			
Leg	**NB**	**SB**	**WB**	**EB**
Control	Stop	Stop	Unc.	Unc.
Number of Lanes	1	1	1	1

Intersection	***Myra Road / Futura Road***			
Leg	**NB**	**SB**	**WB**	**EB**
Control	Unc.	Unc.	Stop	Stop
Number of Lanes	3	3	1	2

Intersection	***Wallula Avenue / Lambert Avenue / Rose Street***			
Leg	**NB**	**SB**	**WB**	**EB**
Control	Stop	Stop	Unc.	Unc.
Number of Lanes	1	1	2	2

Intersection	***Myra Road / Rose Street***			
Leg	**NB**	**SB**	**WB**	**EB**
Control	Signalized	Signalized	Signalized	Signalized
Number of Lanes	3	3	4	4

Intersection	***Offner Road / Rose Street***			
Leg	**NB**	**SB**	**WB**	**EB**
Control	NA	Stop	Unc.	Unc.
Number of Lanes	NA	1	2	2

Intersection	***Avery Street / Rose Street***			
Leg	**NB**	**SB**	**WB**	**EB**
Control	Stop	Stop	Unc.	Unc.
Number of Lanes	1	1	2	2

Intersection	*N 9th Avenue / Rose Street*			
Leg	**NB**	**SB**	**WB**	**EB**
Control	Signalized	Signalized	Signalized	Signalized
Number of Lanes	3	2	3	3

Intersection	*Myra Road / C Street / Poplar Street*			
Leg	**NB**	**SB**	**WB**	**EB**
Control	Signalized	Signalized	Signalized	Signalized
Number of Lanes	3	3	2	2

Intersection	*Myra Road / Whitman Drive*			
Leg	**NB**	**SB**	**WB**	**EB**
Control	Signalized	Signalized	NA	Signalized
Number of Lanes	3	2	NA	3

Intersection	*Myra Road / 12th Street / The Dalles Military Road*			
Leg	**NB**	**SB**	**WB**	**EB**
Control	Signalized	Signalized	Signalized	Signalized
Number of Lanes	3	4	3	3

Intersection	*Myra Road / SR 125*			
Leg	**NB**	**SB**	**WB**	**EB**
Control	NA	Signalized	Signalized	Signalized
Number of Lanes	NA	3	3	3

NA = not applicable – approach does not exist
Stop = stop-controlled leg of intersection
Unc. = uncontrolled leg approaching intersection – does not stop or yield

The project area is defined as the vicinity of the site encompassed by the study intersections. The operation of the intersections can be controlled by signing, roundabouts, or signalization. Table 3 refers to the type of control and number of approach lanes for each leg of each intersection. The existing lane configurations and traffic controls for all intersections are shown in Figure 3.

1.4 Traffic Volumes

1.4.1 Baseline Traffic Volumes

Because of the ongoing COVID-19 (novel coronavirus) pandemic, traffic volumes are somewhat depressed throughout the nation, and current volume data represent highly atypical conditions. The City's *TIA Guidelines* (see References) typically require intersection counts to have been collected within 18 months. It was agreed in negotiation with staff from the City and DKS Associates (DKS), the City's contracted traffic engineering consultant, to waive the usual requirement and instead to follow the methodology described here to estimate reasonable present-day traffic volumes for use in this TIA. These volume estimates address all locations, both where historical data were available and where they were not.

1.4.1.1 Method Where Historical Data Were Available

Historic growth rates were calculated from the following four studied intersections that had two or more points of historical data available. The dates range from March 2011 through December 2018. All data are for the weekday PM peak period.

- Myra Road / Rose Street
- Myra Road / C Street / Poplar Street
- Myra Road / 12th Street / The Dalles Military Road
- Myra Road / SR 125

All locations showed growth in total entering traffic volumes from the prior data. Annual growth rates range between 0.7% and 4.9%. The average and median calculations suggest an overall value of 2.5% (geometric, or annually compounded).

Thus, for each studied intersection with historical data available, a 2.5% annual growth rate was applied to historical data to estimate present volumes (approximately on April 1, 2020). Copies of the historical data and of the growth rate calculations are provided in Appendix A.

1.4.1.2 Method Where Historical Data Were Unavailable

To aid in estimating the current decrease in traffic volumes, traffic counts were collected during the weekday PM peak period at the following five studied intersections on March 31, 2020. Each intersection had at least one historical count available. PBS retained All Traffic Data (ATD) to gather the data.

- Myra Road / Heritage Road / Pine Street
- Myra Rose / Rose Street
- N 9th Avenue / Rose Street
- Myra Road / C Street / Poplar Street
- Myra Road / SR 125

At these locations, the total entering volumes were 25% to 34% below the present values estimated above. The average and median calculations suggest 28% or 29% decreases. Rounding up, the decrease is taken to be approximately 30% across the study area.

For each studied intersection with no historical data available, PBS staff collected traffic counts between March 31 and April 9, 2020. Counts were collected during the weekday PM peak period for all intersections lacking historical data and also during the weekday AM peak period at the three intersections where site trips will access the arterial network. At each intersection, an increase of 30% was applied to the current counts to estimate present volumes. Copies of the historical data, the recent data, and the regional decrease calculations are provided in Appendix A.

1.4.1.3 Present Volumes

Present volumes were estimated at each of the 12 studied intersections by one of the two methods described above. Where deemed reasonable to do so, volumes were balanced between intersections along major corridors to estimate a level of uniformity among the data. Volumes were balanced with reference to the Myra Road / Rose Street intersection (where present volumes were held fixed) both because its historical data were collected during a summer season peak and because the intersection is convenient to the Konen site. The corridors balanced were:

- Myra Road between Heritage Road / Pine Street and SR 125
- Rose Street between Wallula Avenue / Lambert Avenue and Avery Street

The one exception was the Myra Road / C Street / Poplar Street intersection, where outright volume balancing would have reduced the total intersection volumes by 12%. Instead, acknowledging the presence of a major access point for the Walla Walla Town Center (former Blue Mountain Mall) on Myra Road between Rose Street and Poplar Street, the volume adjustment was reduced by half. The volume balancing calculations are provided in Appendix A.

At the remaining studied intersections (listed below), the present volumes estimated in the above sections were preserved without adjustments. These intersections were deemed to be located too far from other studied intersections and/or to have too many intermediate intersections or driveways, for volume balancing to be considered reasonable.

- N 9th Avenue / N 9th Court / Pine Street
- Myra Road / Rose Street (held as fixed for the volume balancing exercise described above)
- N 9th Avenue / Rose Street

The resulting present peak hour volumes for the studied intersections are termed the 2020 baseline volumes. These volumes were input to the intersection operations analyses addressed later in this TIA, and they form the basis of all the future year scenarios as well. The 2020 baseline volumes are presented in Figure 4.

Findings: Because of the ongoing COVID-19 pandemic temporarily closing schools and multiple businesses, present intersection traffic volumes were estimated based on historical data rather than by counting existing volumes. This approach was agreed to in negotiation with staff from the City and DKS Associates.

Historical data available at study area intersections indicate a growth rate of 2.5% (annually compounded), so for locations where historical data were available, past volumes were increased by 2.5% (annually compounded) to estimate April 2020 volumes.

Comparisons between current counts and present projections (based on 2.5% growth) at select study area intersections indicate the COVID-19 pandemic has depressed volumes by approximately 30% across the study area. So, for locations where historical data were unavailable, current counts were increased by 30% to estimate April 2020 volumes.

To apply a level of uniformity to the study, intersection approach volumes were balanced along the Myra Road and Rose Street corridors, using the estimated April 2020 volumes at the Myra Road / Rose Street intersection as a fixed reference. These balanced volumes and the unadjusted volumes at isolated intersections were used as the 2020 baseline volumes for this study.

1.4.2 Background Growth

Background growth is a generic increase in traffic volumes that either is not attributable to specific developments or is attributable to influences outside the study area. Long-range traffic modeling from the Walla Walla Valley Metropolitan Planning Organization (WWVMPO) suggests a background growth rate of approximately 1.0% per year between present conditions and the planning horizon year (2040). Thus, a background growth rate of 1.0% per year (annually compounded) was applied to all 2020 baseline peak hour movement volumes between public roadways at the studied intersections.

1.4.3 In-Process Projects

In-process trips from approved projects were requested from the City of Walla Walla, and no in-process projects were identified for inclusion in this TIA.

1.4.4 Future Volumes

The baseline volumes for 2025 intersection operations analyses, termed the 2025 Without Project volumes, represent the sum of 2020 baseline traffic and 5 years of background growth. Figure 5 presents the 2025 Without Project volumes for the weekday AM and PM peak hours.

The baseline volumes for 2040 intersection operations analysis, termed the 2040 Without Project volumes, represent the sum of 2020 baseline traffic and 20 years of background growth. Figure 11 presents the 2040 Without Project volumes for the weekday AM and PM peak hours.

Findings: Traffic volumes in the study area will continue to increase without or with the project. Generic background growth (at 1% for 5 years) was assumed to add approximately 5.1% to the 2020 baseline volumes to estimate 2025 Without Project volumes. Generic background growth (at 1% for 20 years) was assumed to add approximately 22.0% to the 2020 baseline volumes to estimate 2040 Without Project volumes.

2 PROPOSED CONDITIONS

The proposed development will add traffic to the roadway system. Where the project is located, the size of the project, and when it will be completed are all important elements that need to be considered to determine the impacts of this development on safety and capacity. It is also important to examine how the project will operate with the existing transportation system, estimate how much new traffic it will generate, and predict where traffic generated by the site will be distributed. Furthermore, this section will address any funded infrastructure changes planned by other agencies or developers. All these elements are important in assessing the traffic impacts of this project.

2.1 Project Description

The project will consist of developing 49± acres of vacant land into multiple uses that include single-family residences, multi-family residences, general commercial uses, RV/boat storage, and a super convenience market with a gas station and a coffee shop with a drive-through lane. The site is located on the northeast corner of the Myra Road / Futura Road intersection. The uses will be developed over several phases, and they are expected to be fully occupied by the year 2025. Table 4 provides the anticipated phasing schedule on which the proposed master plan development is to be constructed.

Table 4. Anticipated Phasing for Proposed Development

Use	Total Size of Use	Phasing Schedule (Added Occupancy in Year Noted)				
		2021	2022	2023	2024	2025
Single-Family Residential	215 dwelling units	45 units	45 units	45 units	45 units	35 units
Multi-Family Residential	100 dwelling units	-	-	50 units	50 units	-
Flex Retail	4,200 SF	-	-	4,200 SF	-	-
Super Convenience Market with Gas and Coffee Shop	8 vehicle fueling positions, 2,550 SF market, 1,850 SF Coffee Shop	-	Occupied	-	-	-
RV/Boat Storage	290 storage spaces/units	-	Occupied	-	-	-

SF = square feet floor area

Note that, although the City's *TIA Guidelines* require evaluation at each successive phase's build-out year, this TIA was simplified to include only the 2025 build-out year for the entire site. As shown later in this report, there are no intersection operations impacts at full build-out, meaning there is little value to presenting each phase year's impacts.

2.2 Access and Circulation

There are three roads that currently provide access points into and out of the site. The first access is Futura Road, which will be extended east from its existing intersection with Myra Road through the Konen site to provide the primary access to the site. It is assumed for this TIA that the westbound Futura Road approach to Myra Road will be striped with a separate left-turn lane to align with the eastbound approach lanes.

The second access is Offner Road, which will be extended north from its current terminus at the Konen site's south perimeter (approximately 0.2 mile north of the Offner Road / Rose Street intersection) to connect with the Futura Road extension. The third access is Avery Street, which will be extended north from its current

terminus at the Konen site's southeast corner (approximately 0.1 mile north of the Avery Street / Rose Street intersection) to connect with the Futura Road extension. The project proposes to use these three access points for vehicular and nonmotorized travel into and out of the site.

An alternate access point was considered at the Myra Road / Electric Avenue intersection, with connections via Kenwood Street, Artesia Avenue, and Offner Road. However, this route was deemed unlikely or unattractive for project trips based on travel distance, their expected destinations, and the available alternate routes. Using the Myra Road / Electric Avenue intersection for site access will become more attractive in the long-term future when Electric Avenue is extended to Offner Road. The Konen projects will dedicate and improve their portion of the right-of-way necessary to make this future connection.

Within the development, an internal local roadway network will be developed to serve the various uses proposed, and pedestrian connections will be provided between the public rights-of-way and the individual lots as they develop. Figure 2A and Figure 2B depict the preliminary draft site plans of the Myra-Offner Master Plan projects.

Findings: Futura Road, Offner Road, and Avery Street are assumed as the three access points into and out of the site. An internal local roadway network will be developed to serve the various uses proposed. Pedestrian connections will be provided between the public rights-of-way and the proposed development. The Myra-Offner Master Plan will support the future extension of Electric Avenue to Offner Road with right-of-way dedication and improvements.

2.3 Trip Generation and Distribution

The following sections rely on data provided in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual* and the ITE *Trip Generation Handbook* (see References). Detailed trip generation calculations are provided in Appendix B.

2.3.1 Proposed Trip Generation

The City of Walla Walla roadway network will see some increase in traffic volume from the proposed Myra-Offner Master Plan project. Table 5 presents the conceptual proposed uses and their corresponding ITE land use models organized by ITE land use code.

Table 5. Myra-Offner Master Plan Uses

Site Use	Developed Size[a]	ITE Land Use Code	ITE Land Use Model
RV/Boat Storage	290 SU	151	Mini-Warehouse
Single-Family Residential	215 DU	210	Single-Family Detached Housing
Multi-Family Residential	100 DU	221	Multifamily Housing (Mid-Rise)
General Commercial	4,200 SF	820	Shopping Center
Coffee Shop	1,850 SF	937	Coffee/Donut Shop with Drive-Through Window
Super C-Store + Gas	8 VFP	960	Super Convenience Market with Gas Station

[a] SU = storage units; DU = dwelling units; SF = square feet gross leasable area; VFP = vehicle fueling positions

The total trip generation estimates for the Myra-Offner Master Plan project were calculated using either the ITE weighted average trip rates or regression equations, following ITE *Handbook* guidelines.

With multiple and diverse uses, internal trip capture reductions were estimated for the project following guidance in the ITE *Handbook*, specifically using the National Cooperative Highway Research Program (NCHRP) Report 684 method. For the internal trip capture exercise, the single-family and multi-family uses were treated together as residential development types, the shopping center use was treated as a retail development type, and the coffee shop use was treated as a restaurant. All internal trips were applied in the 2025 analysis scenarios.

Pass-by trips were evaluated for the General Commercial, Coffee Shop, and Super Convenience Store with Gas Station uses. For the Shopping Center (ITE 820) use, a pass-by trip rate of 34% for PM peak hour was used, as published in the ITE *Handbook*. For the AM peak hour, a rate of half the PM rate was assumed: 17%. For the Super Convenience Market with Gas Station (ITE 960), pass-by trip rates of 62% for the AM peak hour and 56% for the PM peak hour were used. These were borrowed from the rates published in the ITE *Handbook* for a similar use, a Gas Station with Convenience Market (ITE 945). For the Coffee/Donut Shop with Drive-Through Window (ITE 937), pass-by trip rates of 49% for the AM peak hour and 50% for the PM peak hour were used. These were borrowed from the rates published in the ITE *Handbook* for a similar use, a Fast-Food Restaurant with Drive-Through Window (ITE 934). See Figure 6 for the pass-by trip distribution and assignment.

Table 6 summarizes the project-generated trips, including the internal, pass-by, and primary trips. Detailed calculations are provided in Appendix B.

Table 6. Trip Generation Estimates for Myra-Offner Master Plan

Land Use (ITE Code)	Mini-Warehouse (151)		Single-Family Detached Housing (210)		Multifamily Housing (Mid-Rise) (221)		Shopping Center (820)		Coffee/Donut Shop with Drive-Through Window (937)		Super Convenience Market/Gas Station (960)		Total	
Weekday Average Daily Trips (ADT)	52		2,103		543		696		1,518		1,844		6,756	
Peak Hour	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**
Total	4	6	157	212	34	44	154	52	165	80	225	184	739	578
Internal	*NA*	*NA*	*(17)*	*(19)*	*(4)*	*(4)*	*(18)*	*(30)*	*(35)*	*(33)*	*NA*	*NA*	*(74)*	*(86)*
External	4	6	140	193	30	40	136	22	130	47	225	184	665	492
Pass-By	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*(23)*	*(7)*	*(64)*	*(24)*	*(140)*	*(103)*	*(227)*	*(134)*
Primary Trips	4	6	140	193	30	40	113	15	66	23	85	81	438	358

NA = not applicable
Note: negative values are shown in parentheses.

Findings: Including all land uses and all development phases, the Myra-Offner Master Plan is anticipated to generate 438 net new vehicle trips during the AM peak hour and 358 net new trips during the PM peak hour.

In addition, the Myra-Offner Master Plan is anticipated to generate 74 internal trips and 227 pass-by trips during the AM peak hour, and 86 internal trips and 134 pass-by trips during the PM peak hour.

2.3.2 Proposed Trip Distribution

The proposed trip distribution of pass-by trips is based on the ratio of northbound and southbound volumes on Myra Road in the 2025 Without Project scenario, as presented in Figure 5. Volumes were assessed at the Futura Road intersection where the commercial developments will be located within the overall Konen site. No pass-by trips were assessed from Rose Street because the commercial uses will not be located near it. The proposed pass-by distribution pattern is as follows:

- 50% (AM) and 48% (PM) from northbound Myra Road
- 50% (AM) and 52% (PM) from southbound Myra Road

The distribution pattern above represents the pass-by distribution of vehicle trips that patronize one of the Konen site uses while traveling along Myra Road to another destination. The distribution and assignment of the pass-by trips to the project site are shown on Figure 6.

The proposed distribution of primary (net new) trips is based on a review of the land uses within the study area, on the distribution of existing traffic patterns, on portions of the WWVMPO travel-demand model, and on engineering judgment. As agreed in discussions with City and DKS staff, two trip distribution patterns were used: one for only the single-family residential land uses and another for all other uses. The proposed distribution pattern for only the single-family residential land use is as follows:

- 10% to and from the west on US Highway 12, west of Myra Road
- 5% to and from the west on Wallula Avenue, northwest of Rose Street
- 10% to and from the west on Rose Street, west of Wallula Avenue / Lambert Avenue
- 15% to and from the west on C Street, west of Myra Road
- 10% to and from the west on Whitman Drive, west of Myra Road
- 5% to and from the southwest on SR 125, west of Myra Road
- 5% to and from the south on Avery Street, south of Rose Street
- 5% to and from the south on N 9th Avenue, south of Rose Street
- 20% to and from the east on Rose Street, east of N 9th Avenue
- 5% to and from the east on Pine Street, east of N 9th Avenue
- 5% to and from the east on US Highway 12, east of Myra Road
- 5% to and from the north on N 13th Avenue, north of Pine Street

The trip distribution pattern above represents an external distribution of project trips entering and exiting the study area for only the single-family residential land use. The distribution and assignment of the primary trips to the project site are shown on Figure 7.

The proposed distribution pattern for the other land uses is as follows:

- 10% to and from the west on US Highway 12, west of Myra Road
- 5% to and from the west on Wallula Avenue, northwest of Rose Street
- 10% to and from the west on Rose Street, west of Wallula Avenue / Lambert Avenue
- 15% to and from the west on C Street, west of Myra Road
- 10% to and from the west on Whitman Drive, west of Myra Road
- 5% to and from the southwest on SR 125, west of Myra Road
- 5% to and from the south on Avery Street, south of Rose Street
- 5% to and from the south on N 9th Avenue, south of Rose Street

- 5% to and from the east on Rose Street, east of N 9th Avenue
- 5% to and from the east on Pine Street, east of N 9th Avenue
- 20% to and from the east on US Highway 12, east of Myra Road
- 5% to and from the north on N 13th Avenue, north of Pine Street

The trip distribution pattern above represents an external distribution of project trips entering and exiting the study area for the other land uses. The distribution and assignment of the primary trips to the project site are shown on Figure 8.

The total primary trip assignments generated by all land uses are shown on Figure 9.

2.3.3 Future Volumes With Project

The Myra-Offner Master Plan project is expected to be completed and fully occupied in 2025. Figure 10 presents the 2025 With Project volumes, or the sum of 2025 Without Project volumes and the site-generated trips (both pass-by and primary trips), for the weekday AM and PM peak hours.

Figure 12 presents the 2040 With Project volumes, or the sum of 2040 Without Project volumes and the site-generated trips (both pass-by and primary trips), for the weekday AM and PM peak hours.

3 INTERSECTION OPERATIONS AND ROADWAY CAPACITY ANALYSES

3.1 Operations Description

Traffic operations are assessed in terms of level of service (LOS), a concept developed by transportation engineers to qualify the level of operation of intersections and roadways (*Highway Capacity Manual*, see References). LOS measures are classified in grades "A" through "F," indicating a range of operation, with LOS "A" signifying the best level of operation and LOS "F" representing the worst level.

LOS at intersections is quantified in terms of average delay per vehicle. LOS "A" reflects full freedom of operation for a driver, while LOS "F" represents excessive delay to the driver and operational failure. The criteria for unsignalized intersections are based on the theory of gap acceptance for stop-controlled and yield-controlled movements. The criteria for signalized intersections are based on studied levels of driver behavior at various durations of delay.

The volume-to-capacity (v/c) ratio quantifies the portion of the theoretical capacity consumed by traffic demand volume. A v/c ratio of zero (0.00) reflects none of the capacity is consumed and all the capacity is fully available to approaching drivers. A v/c ratio of one (1.00) reflects all the capacity is consumed and represents operational failure. The v/c ratio typically is calculated for each intersection approach lane group.

3.2 Operation Standards

Based on the City's *Comprehensive Plan* (see References), the City of Walla Walla LOS standards operating conditions for both signalized and unsignalized intersections in urban areas may not exceed LOS "D" or a v/c ratio of 0.90 for intersections on arterials or collectors. The arterials and collectors include Myra Road, Poplar Street between Myra Road and 9th Avenue, and Rose Street between Myra Road and 9th Avenue. For all other intersections, the intersections may not exceed LOS "E" or a v/c ratio of 0.95.

In addition, based on the City's *TIA Guidelines* (see References),

- No existing intersection or critical movement should worsen by more than two levels of service.
- Delay for the critical movement at an unsignalized intersection must not increase by more than 10 seconds with the proposed additional traffic.
- Traffic mitigation shall be recommended to offset other safety issues, capacity issues, and/or specific neighborhood traffic impacts caused by an increase of 25% or more in average daily traffic (ADT) on adjacent local or collector streets due to the proposed development.

The above operation standards were applied to the intersections under City of Walla Walla jurisdiction:

- Myra Road / Futura Road
- Myra Road / Rose Street
- Offner Road / Rose Street
- Avery Street / Rose Street
- Myra Road / C Street / Poplar Street
- Myra Road / Whitman Drive
- Myra Road / The Dalles Military Road

The City of College Place's *Transportation Plan* (see References) adopts a LOS standard of "D" for all roadway segments, a LOS of "D" for all signalized intersections, and a LOS "D" for the critical movement of all non-signalized intersections. This operation standard was applied to the Wallula Avenue / Lambert Avenue / Rose Street intersection.

The Washington State Department of Transportation (WSDOT) requires a level of service "D" or better for state highways in urban areas of Walla Walla County, including SR 125 (see References). In addition, the WSDOT guidelines for roundabout analysis recommend the maximum v/c ratio for any approach lane be within a range of 0.85 to 0.90. These operation standards were applied to the following intersections:

- Myra Road / Heritage Road / Pine Street
- N 9th Avenue / N 9th Court / Pine Street
- N 9th Avenue / Rose Street
- Myra Road / SR 125

3.3 Analysis Methodology

Traffic impacts were estimated to determine the extent of change in traffic conditions caused by the development of this project. To make this determination, the following assumptions were employed:

- The individual peak hour volumes were analyzed for 2020, 2025, and 2040.
- The peak hour factor (PHF) for the overall intersection, as calculated from the count data, was applied for 2020 baseline analysis scenario. For 2025 and 2040 conditions, the PHF recommended by the City's *TIA Guidelines* (see References) was applied unless the count data PHF was higher.
- A minimum heavy vehicle percentage (HV%) of 2% was assumed for each movement for all analysis scenarios (2020, 2025, and 2040). The HV% calculated from the count data was applied if it was greater than 2%.
- Baseline traffic volumes on the surrounding street system were determined prior to adding the traffic impacts of the proposed project. This was done to establish a baseline for measuring the project impacts at the time of its development. Baseline traffic volume estimates were prepared for year of full buildout, 2025 Without Project, and for the planning horizon year, 2040 Without Project volumes.
- As noted previously, trip generation estimates for the project were prepared for the weekday AM and PM peak hours on the surrounding street system.
- Cumulative traffic impacts of the proposed project were determined by superimposing the project-generated traffic onto the background weekday AM and PM peak traffic at all studied intersections. These are termed the 2025 With Project and 2040 With Project conditions.
- The LOS for all signalized and stop-controlled intersections was calculated with Trafficware's Synchro software, Version 10, based on *Highway Capacity Manual* 6th Edition (2016) methodologies.
- The LOS for the roundabout intersection was calculated with Akcelik Associates' SIDRA Intersection software, Version 9, based on WSDOT-recommended settings (see References).
- Intersection results are reported differently depending on the control type.
    - Two-way stop-controlled intersection results report the critical movement LOS, delay, and v/c ratio.
    - All-way stop-controlled, roundabout, and signalized intersection results report the overall intersection LOS and delay as well as the critical lane v/c ratio.

3.4 Level of Service Analyses

LOS calculation reports for the study area intersections are provided in Appendix C. The key analysis findings are listed in the following tables.

3.4.1 2020 Existing Conditions

Table 7 describes the existing LOS for each intersection within the study area for the 2020 existing volumes during the AM and PM peak hours.

Table 7. Estimated 2020 Level of Service for Existing Conditions for Study Area Intersections

Int. #	INTERSECTION	JURISDICTION *(Operating Standard)*	AM Peak Hour			PM Peak Hour		
			LOS	*Delay (sec/ veh)*	*v/c (critical lane)*	*LOS*	*Delay (sec/ veh)*	*v/c (critical lane)*
1	Myra Road / Heritage Road / Pine Street	WSDOT *(v/c ≤ 0.85-0.90)*	-	-	-	A	4.2	0.222 *(WB)*
2	N 9th Avenue / N 9th Court / Pine Street	WSDOT *(LOS D)*	-	-	-	C	20.5	0.537 *(NB)*
3	Myra Road / Futura Road	City *(LOS E, v/c ≤ 0.95)*[a]	A	9.3	0.001 *(EB TH-RT)*	C	15.3	0.027 *(EB-LT)*
4	Wallula Avenue / Lambert Avenue / Rose Street	City[b] *(LOS D)*	-	-	-	B	13.8	0.149 *(SB)*
5	Myra Road / Rose Street	City *(LOS D, v/c ≤ 0.90)*	-	-	-	C	20.4	0.61 *(WB-LT)*
6	Offner Road / Rose Street	City *(LOS D, v/c ≤ 0.90)*	B	11.5	0.024 *(SB)*	B	12.8	0.053 *(SB)*
7	Avery Street / Rose Street	City *(LOS D, v/c ≤ 0.90)*	B	12.5	0.076 *(NB)*	B	14.1	0.033 *(SB)*
8	N 9th Avenue / Rose Street	WSDOT *(LOS D)*	-	-	-	C	22.3	0.80 *(WB TH)*
9	Myra Road / C Street / Poplar Street	City *(LOS D, v/c ≤ 0.90)*	-	-	-	C	20.5	0.78 *(WB TH-RT)*
10	Myra Road / Whitman Drive	City *(LOS D, v/c ≤ 0.90)*	-	-	-	A	7.4	0.61 *(NB-LT)*
11	Myra Road / 12th Street / The Dalles Military Road	City *(LOS D, v/c ≤ 0.90)*	-	-	-	B	17.0	0.59 *(WB TH)*
12	Myra Road / SR 125	WSDOT *(LOS D)*	-	-	-	C	23.7	0.89 *(EB LT)*

[a] Futura Road is a local roadway east of Myra Road.
[b] City of College Place operating standard.

As shown in Table 7, all studied intersections currently operate at an acceptable LOS during the weekday AM and PM peak hours.

3.4.2 2025 Future Conditions Without Project

Table 8 describes the LOS for each intersection within the study area for 2025 Without Project during the AM and PM peak hours.

Table 8. Estimated 2025 Level of Service Without Project for Study Area Intersections

Int. #	INTERSECTION	JURISDICTION *(Operating Standard)*	AM Peak Hour			PM Peak Hour		
			LOS	***Delay (sec/ veh)***	***v/c (critical lane)***	***LOS***	***Delay (sec/ veh)***	***v/c (critical lane)***
1	Myra Road / Heritage Road / Pine Street	WSDOT *(v/c ≤ 0.85-0.90)*	-	-	-	A	4.2	0.206 *(WB)*
2	N 9th Avenue / N 9th Court / Pine Street	WSDOT *(LOS D)*	-	-	-	C	20.8	0.544 *(NB)*
3	Myra Road / Futura Road	City *(LOS E, v/c ≤ 0.95)*[a]	A	9.3	0.001 *(EB TH-RT)*	C	15.9	0.029 *(EB-LT)*
4	Wallula Avenue / Lambert Avenue / Rose Street	City[b] *(LOS D)*	-	-	-	B	14.3	0.163 *(SB)*
5	Myra Road / Rose Street	City *(LOS D, v/c ≤ 0.90)*	-	-	-	C	20.7	0.63 *(WB-LT)*
6	Offner Road / Rose Street	City *(LOS D, v/c ≤ 0.90)*	B	11.1	0.019 *(SB)*	B	13.2	0.058 *(SB)*
7	Avery Street / Rose Street	City *(LOS D, v/c ≤ 0.90)*	B	12.3	0.072 *(NB)*	B	14.6	0.035 *(SB)*
8	N 9th Avenue / Rose Street	WSDOT *(LOS D)*	-	-	-	C	22.6	0.81 *(WB TH)*
9	Myra Road / C Street / Poplar Street	City *(LOS D, v/c ≤ 0.90)*	-	-	-	C	21.2	0.79 *(WB TH-RT)*
10	Myra Road / Whitman Drive	City *(LOS D, v/c ≤ 0.90)*	-	-	-	A	7.3	0.60 *(NB-LT)*
11	Myra Road / 12th Street / The Dalles Military Road	City *(LOS D, v/c ≤ 0.90)*	-	-	-	B	17.2	0.62 *(WB TH)*
12	Myra Road / SR 125	WSDOT *(LOS D)*	-	-	-	C	25.2	0.93 *(EB LT)*

[a] Futura Road is a local roadway east of Myra Road.
[b] City of College Place operating standard.

As shown in Table 8, all studied intersections will operate at an acceptable LOS in the 2025 year of opening Without Project conditions during the weekday AM and PM peak hours.

3.4.3 2025 Future Conditions With Project

Table 9 describes the LOS for each intersection within the study area for 2025 With Project during the AM and PM peak hours.

Table 9. Estimated 2025 Level of Service With Project for Study Area Intersections

Int. #	INTERSECTION	JURISDICTION *(Operating Standard)*	AM Peak Hour			PM Peak Hour		
			LOS	***Delay (sec/ veh)***	***v/c (critical lane)***	***LOS***	***Delay (sec/ veh)***	***v/c (critical lane)***
1	Myra Road / Heritage Road / Pine Street	WSDOT *(v/c ≤ 0.85-0.90)*	-	-	-	A	4.2	0.229 *(WB)*
2	N 9th Avenue / N 9th Court / Pine Street	WSDOT *(LOS D)*	-	-	-	C	21.6	0.557 *(NB)*
3	Myra Road / Futura Road	City *(LOS E, v/c ≤ 0.95)*[a]	E	39.1	0.566 *(WB-LT)*	D	27.6	0.309 *(WB-LT)*
4	Wallula Avenue / Lambert Avenue / Rose Street	City[b] *(LOS D)*	-	-	-	C	15.5	0.202 *(SB)*
5	Myra Road / Rose Street	City *(LOS D, v/c ≤ 0.90)*	-	-	-	C	21.4	0.71 *(WB-LT)*
6	Offner Road / Rose Street	City *(LOS D, v/c ≤ 0.90)*	B	11.3	0.118 *(SB)*	B	14.7	0.156 *(SB)*
7	Avery Street / Rose Street	City *(LOS D, v/c ≤ 0.90)*	B	14.0	0.111 *(NB)*	C	17.1	0.257 *(NB)*
8	N 9th Avenue / Rose Street	WSDOT *(LOS D)*	-	-	-	C	23.5	0.83 *(WB TH)*
9	Myra Road / C Street / Poplar Street	City *(LOS D, v/c ≤ 0.90)*	-	-	-	C	21.9	0.80 *(WB TH-RT)*
10	Myra Road / Whitman Drive	City *(LOS D, v/c ≤ 0.90)*	-	-	-	A	7.6	0.61 *(NB-LT)*
11	Myra Road / 12th Street / The Dalles Military Road	City *(LOS D, v/c ≤ 0.90)*	-	-	-	B	17.2	0.62 *(WB TH)*
12	Myra Road / SR 125	WSDOT *(LOS D)*	-	-	-	C	27.3	0.98 *(EB LT)*

[a] Futura Road is a local roadway east of Myra Road.
[b] City of College Place operating standard.

As shown in Table 9, all studied intersections will operate at an acceptable LOS in the 2025 year of opening With Project conditions during the weekday AM and PM peak hours.

3.4.4 2040 Future Conditions Without Project

Table 10 describes the LOS for each intersection within the study area for 2040 Without Project during the AM and PM peak hours.

Table 10. Estimated 2040 Level of Service Without Project for Study Area Intersections

Int. #	INTERSECTION	JURISDICTION *(Operating Standard)*	AM Peak Hour			PM Peak Hour		
			LOS	***Delay (sec/ veh)***	***v/c (critical lane)***	***LOS***	***Delay (sec/ veh)***	***v/c (critical lane)***
1	Myra Road / Heritage Road / Pine Street	WSDOT *(v/c ≤ 0.85-0.90)*	-	-	-	A	4.3	0.232 *(WB)*
2	N 9th Avenue / N 9th Court / Pine Street	WSDOT *(LOS D)*	-	-	-	D	32.5	0.723 *(NB)*
3	Myra Road / Futura Road	City *(LOS E, v/c ≤ 0.95)*[a]	A	9.5	0.001 *(EB TH-RT)*	C	18.2	0.042 *(EB-LT)*
4	Wallula Avenue / Lambert Avenue / Rose Street	City[b] *(LOS D)*	-	-	-	C	16.4	0.218 *(SB)*
5	Myra Road / Rose Street	City *(LOS D, v/c ≤ 0.90)*	-	-	-	C	21.7	0.72 *(WB-LT)*
6	Offner Road / Rose Street	City *(LOS D, v/c ≤ 0.90)*	B	11.7	0.025 *(SB)*	B	14.6	0.08 *(SB)*
7	Avery Street / Rose Street	City *(LOS D, v/c ≤ 0.90)*	B	13.4	0.093 *(NB)*	C	16.6	0.052 *(SB)*
8	N 9th Avenue / Rose Street	WSDOT *(LOS D)*	-	-	-	C	24.4	0.84 *(WB TH)*
9	Myra Road / C Street / Poplar Street	City *(LOS D, v/c ≤ 0.90)*	-	-	-	C	23.6	0.82 *(WB TH-RT)*
10	Myra Road / Whitman Drive	City *(LOS D, v/c ≤ 0.90)*	-	-	-	A	7.7	0.67 *(NB-LT)*
11	Myra Road / 12th Street / The Dalles Military Road	City *(LOS D, v/c ≤ 0.90)*	-	-	-	B	18.0	0.68 *(WB TH)*
12	Myra Road / SR 125	WSDOT *(LOS D)*	-	-	-	C	32.0	1.08 *(EB LT)*

[a] Futura Road is a local roadway east of Myra Road.
[b] City of College Place operating standard.

As shown in Table 10, all studied intersections will operate at an acceptable LOS in the 2040 horizon year Without Project conditions during the weekday AM and PM peak hours.

3.4.5 2040 Future Conditions With Project

Table 11 describes the LOS for each intersection within the study area for 2040 With Project during the AM and PM peak hours.

Table 11. Estimated 2040 Level of Service With Project for Study Area Intersections

Int. #	INTERSECTION	JURISDICTION *(Operating Standard)*	AM Peak Hour			PM Peak Hour		
			LOS	***Delay (sec/ veh)***	***v/c (critical lane)***	***LOS***	***Delay (sec/ veh)***	***v/c (critical lane)***
1	Myra Road / Heritage Road / Pine Street	WSDOT *(v/c ≤ 0.85-0.90)*	-	-	-	A	4.3	0.257 *(WB)*
2	N 9th Avenue / N 9th Court / Pine Street	WSDOT *(LOS D)*	-	-	-	D	34.9	0.744 *(NB)*
3	Myra Road / Futura Road	City *(LOS E, v/c ≤ 0.95)*[a]	**F**	**53.9**	**0.667 *(WB-LT)***	D	34.8	0.372 *(WB-LT)*
4	Wallula Avenue / Lambert Avenue / Rose Street	City[b] *(LOS D)*	-	-	-	C	17.9	0.264 *(SB)*
5	Myra Road / Rose Street	City *(LOS D, v/c ≤ 0.90)*	-	-	-	C	22.7	0.82 *(WB-LT)*
6	Offner Road / Rose Street	City *(LOS D, v/c ≤ 0.90)*	B	11.9	0.132 *(SB)*	C	16.7	0.194 *(SB)*
7	Avery Street / Rose Street	City *(LOS D, v/c ≤ 0.90)*	C	15.5	0.14 *(NB)*	C	20.8	0.339 *(NB)*
8	N 9th Avenue / Rose Street	WSDOT *(LOS D)*	-	-	-	C	25.4	0.86 *(WB TH)*
9	Myra Road / C Street / Poplar Street	City *(LOS D, v/c ≤ 0.90)*	-	-	-	C	24.9	0.83 *(WB TH-RT)*
10	Myra Road / Whitman Drive	City *(LOS D, v/c ≤ 0.90)*	-	-	-	A	8.0	0.68 *(NB-LT)*
11	Myra Road / 12th Street / The Dalles Military Road	City *(LOS D, v/c ≤ 0.90)*	-	-	-	B	18.0	0.68 *(WB TH)*
12	Myra Road / SR 125	WSDOT *(LOS D)*	-	-	-	C	34.4	1.13 *(EB LT)*

[a] Futura Road is a local roadway east of Myra Road.
[b] City of College Place operating standard.

As shown in Table 11, all studied intersections except one will operate at an acceptable LOS in the 2040 horizon year With Project conditions during the weekday AM and PM peak hours. The exception is the Myra Road / Futura Road intersection, whose westbound left-turn lane will operate at LOS F in the AM peak hour.

3.5 Peak Hour Signal Warrant

The criteria for the analysis of signals at intersections are based on the Manual on Uniform Traffic Control Devices (MUTCD, see References), Section 4C.04 Warrant 3, Peak Hour. The peak hour signal warrant is intended for use at a location where traffic conditions are such that for a minimum of one hour of an average day, the minor-street traffic suffers undue delay when entering or crossing the major street. Appendix D presents the peak hour signal warrant plot for the Myra Road / Futura Road intersection.

Findings: The peak hour signal warrant was not met at the Myra Road / Futura Road intersection in the 2040 With Project conditions for either the AM or PM peak hour.

3.6 Level of Service Analysis Discussion

With one exception, all studied intersections are projected to operate at an acceptable LOS in all scenarios and during both the weekday AM and PM peak hours. The exception is the Myra Road / Futura Road intersection, which will operate at LOS F for the westbound left-turn lane in the 2040 With Project scenario during the AM peak hour. The turn lane will operate acceptably during the 2025 With Project scenario, which includes all proposed trips from the Myra-Offner Master Plan. The intersection fails due to background growth on Myra Road added from 2025 to 2040. In the near term, drivers have the option to follow Offner Road south to turn right onto Rose Street. In the long term, some of the westbound left-turn trips at Futura Road are anticipated to use the Electric Avenue connection to Offner Road that will be constructed in future. Therefore, with alternate routes available and with signal warrants not met, no mitigation is required or recommended at the Myra Road / Futura Road intersection.

Findings: In all analysis scenarios, both without and with project conditions, all except one studied intersection will operate at an acceptable LOS during both the weekday AM and PM peak hours. The exception is the Myra Road / Futura Road intersection, which will operate at LOS F for westbound left-turn lane in the 2040 With Project scenario during the AM peak hour. This intersection fails due to background growth on Myra Road. Alternate routes (Offner Road in the near term plus Electric Avenue in the long term) are available, and signal warrants are not met, so no mitigation is not required or recommended.

Recommendations: Future development projects adding trips to Futura Road should monitor the LOS operations and signal warrant thresholds at Myra Road / Futura Road intersection.

*Finding: T*he completion of the Electric Avenue from Myra Road to Offner Road. will reduce the traffic volume of left turns from westbound Furtura Road.

*Recommendation: T*he full roadway width of right-of-way should be dedicated for the extension of Electric Avenue from Offner Road to the western property line of the site.

3.7 Volumes on Adjacent Collector and Local Roadways

As noted above, the City's *TIA Guidelines* (see References) stipulate that daily traffic volume increases of 25% or more on collector or local roadways adjacent to a proposed development should recommend measures to mitigate safety issues, capacity issues, and/or specific neighborhood traffic impacts. While daily traffic volumes were not evaluated as part of this TIA, peak hour volumes may be used as a proxy indicator. Table 12 presents

a summary of the peak hour volume increases attributable to the Konen site developments on nearby collector and local roadways.

Table 12. Total (Bi-Directional) Peak Hour Volumes in 2025 for Adjacent Collector or Local Segments

ROADWAY *(Segment)*	AM Peak Hour			PM Peak Hour		
	Without Project	***With Project***	**Increase**	***Without Project***	***With Project***	**Increase**
Offner Road *(North of Rose Street)*	24	118	**392%**	41	133	**224%**
Avery Street *(North of Rose Street)*	27	98	**263%**	25	111	**344%**
Avery Street *(South of Rose Street)*	76	98	**29%**	114	131	15%

As shown in Table 12, trips from the Konen Myra-Offner Master Plan developments are anticipated to increase peak hour traffic volumes by significant percentages on Offner Road and Avery Street north of Rose Street. Therefore, the developments should recommend mitigation measures. See section 4.5 of this TIA for recommended mitigation measures.

Findings: Trips generated by the Konen Myra-Offner Master Plan will impact Offner Road and Avery Street with increases ranging from 15% to 392%. Two segments meet or exceed the City's 25% threshold for recommending mitigation measures: Offner Road north of Rose Street and Avery Street north of Rose Street. Recommendations to mitigate pedestrian safety are discussed later in this report.

4 SAFETY ANALYSIS

This section addresses safety components of a TIA, including the merits for turn lanes, the existing multimodal facilities and planned multimodal improvements, and intersection sight distance (ISD) at the three access intersections, plus the collision histories at all the study area intersections.

4.1 Left-Turn Storage Analysis

The criteria for the analysis of left-turn lanes at uncontrolled intersection legs are based on the WSDOT *Design Manual* (see References), Exhibit 1310-7b, Left-Turn Storage Guidelines: Four-Lane, Unsignalized. The exhibit provides guideline curves for left-turn storage lengths of various lengths. Appendix E presents evaluations of the left-turn lane criteria on the approaches relevant to this TIA.

It was found that a left-turn lane merits further investigation at the following locations:

- Eastbound Rose Street at Offner Road, based on the 2025 With Project conditions
- Eastbound Rose Street at Avery Street, based on the 2025 With Project conditions

After further investigation, it was found that the City of Walla Walla has programmed a multimodal improvement study and improvement for Rose Street: projects FS-77a and MM-77b noted on Exhibit 49 of the City's *Comprehensive Plan* (see References). These are expected to assess the corridor holistically, considering left-turn lanes and other merits, and to recommend converting the roadway cross section from four vehicle lanes to three (including a center turn lane). The following section discusses mitigating the Myra-Offner Master Plan impacts to the left-turn lanes on Rose Street in a manner consistent with the City's planned improvements.

Findings: Eastbound Rose Street will meet the criteria for further consideration of a left-turn lane at both Offner Road and Avery Street based on the 2025 With Project conditions. Left-turn lanes are expected to be incorporated within a future lane conversion improvement along Rose Street, and proportionate contributions by the Myra-Offner Master Plan projects are appropriate.

4.2 Left-Turn Lane Mitigation

As noted above, the weekday PM peak hour volumes in the 2025 With Project scenario merit consideration for left-turn lanes being installed for eastbound Rose Street at the Offner Road and Avery Street intersections. In lieu of installing these turn lanes, it is recommended that the Myra-Offner Master Plan contribute to the City's programmed multimodal improvements along Rose Street, expecting that the improvements will include a center turn lane to provide for the left-turn function. Contributions are recommended to be made in proportion to the project impacts.

The City provided a methodology, detailed in Appendix F, whereby the development would contribute a portion of the improvement costs based on the proportion of the traffic increase attributable to the project. Additionally, for a corridor project such as along Rose Street, the contribution would be scaled according to the impacted segment length as a portion of the total improvement length.

The City provided two preliminary cost estimates for the Rose Street corridor improvements: $1,130,000 assuming the use of plastic pavement markings (more expensive and more durable) or $521,024 assuming paint pavement markings (less expensive and less durable). This TIA assumes upon the plastic pavement markings being selected.

The Myra-Offner Master Plan trip impacts to the Rose Street segment west of Offner Road are approximately 74% of the expected volume increase from 2020 to 2025. Likewise, the trip impacts to the segment west of Avery Street are approximately 68%. Installing a left-turn lane would impact a segment approximately one-tenth of a mile in length, and the total Rose Street corridor is approximately 1.23 miles in length. The length factor for each turn lane is 8% (0.1 / 1.23). The net proportion for each turn lane is the product of the two percentages: 6.0% at Offner Road and 5.5% at Avery Street. Applying these percentages to the City's cost estimates indicates that the Master Plan should contribute $130,300, assuming the plastic pavement markings are selected. Calculation details are provided in Appendix F.

Findings: For the affected segments of Rose Street, the project impacts on the corridor's left-turn lanes represent 6.0% at Offner Road plus 5.5% at Avery Street.

Recommendations: Contribute to the Rose Street corridor lane conversion project: $130,300 assuming plastic pavement markings are selected.

4.3 Right-Turn Treatment Analysis

The criteria for the analysis of right-turn lanes at uncontrolled intersection legs are based on the WSDOT *Design Manual* (see References), Exhibit 1310-11, Right-Turn Lane Guidelines, which notes:

Right-turn movements influence intersection capacity even though there is not conflict between right-turning vehicles and opposing traffic. Right-turn lanes might be needed to maintain efficient intersection operation. Use the following to determine when to consider right-turn lanes at unsignalized intersections:

- *For two-lane roadways and for multilane roadways with a posted speed of 45 mph or above, when recommended by Exhibit 1310-11.*

The proposed access intersections include uncontrolled multilane arterials (Myra Road and Rose Street) with posted speed limits of 35 miles per hour (mph). By this criterion, the intersections do not merit further consideration for right-turn lanes. Despite this, Myra Road was evaluated due to the high number of northbound right-turn movements expected with the Konen Myra-Offner Master Plan development. It was found that the WSDOT criteria to consider a right-turn lane were satisfied for:

- Northbound Myra Road at Futura Road, based on the 2025 With Project conditions

Appendix E presents the evaluation of the right-turn lane criteria. Further evaluation of this location, reviewing all the factors identified in the WSDOT *Design Manual* (see References), did not find any significant consideration to recommend a right-turn lane.

A right-turn lane on northbound Myra Road will compromise pedestrian and bicyclist safety by increasing the crossing distance across Myra Road in the existing marked crosswalk and by complicating the Myra Road multi-use path's crossing of Futura Road. The need for the right-turn lane will be reduced when Electric Avenue is extended to Offner Road, diverting some of the northbound right-turning trips from Futura Road to Electric Avenue. The speed limit on Myra Road is 35 mph, which falls below the 45-mph threshold at which right-turn lanes provide the most benefit.

Findings: Although the Myra Road / Futura Road intersection volumes from the 2025 With Project meet the WSDOT criteria to consider a northbound right-turn lane, no other factors recommend its implementation. No right-turn lanes are recommended with the project.

4.4 Collision Analysis

Collision data from the study area was obtained from WSDOT for the five-year period spanning from January 2015 through December 2019. This analysis assumes that a collision rate less than the critical collision rate for the intersection is typically considered to be within acceptable parameters. A collision rate above the critical rate is worthy of further examination. The detailed collision data can be found in Appendix G. Table 13 presents the results of the collision analysis.

Table 13. Collision Analysis for Study Area Intersections (January 2015 through December 2019)

Intersection	Collision Type					Total Collisions	Critical Rate	Collison Rate
	Rear-end	Sideswipe	Angle	Object	Pedestrian / Bicycle			
Myra Road / Heritage Road / Pine Street	1	3	4	1	-	9	0.85	0.41
N 9th Avenue / N 9th Court / Pine Street	-	-	3	-	-	3	0.91	0.22
Myra Road / Futura Road	-	-	-	-	-	0	-	-
Wallula Avenue / Lambert Avenue / Rose Street	-	-	1	1	-	2	0.96	0.21
Myra Road / Rose Street	4	-	3	-	-	7	0.83	0.27
Offner Road / Rose Street	1	-	2	1	1	5	0.92	0.39
Avery Street / Rose Street	1		6			7	0.91	0.51
N 9th Avenue / Rose Street	5	2	8	1	2	18	0.82	0.63
Myra Road / C Street / Poplar Street	18	1	6	-	1	26	0.81	0.79
Myra Road / Whitman Drive	1	-	-	-	-	1	0.85	0.05
Myra Road / 12th Street / The Dalles Military Road	5	-	7	2	-	14	0.82	0.51
Myra Road / SR 125	9	4	5	3	-	22	0.81	0.66

To calculate the collision rate, the PM peak hour total entering volumes from the existing turning movement counts were multiplied by 10 to provide an approximation of the ADT. Detailed calculations of critical rates and collision rates are provided in Appendix G.

As shown in Table 13, all the calculated collision rates are lower than the critical rates. There were no fatalities and two collisions that resulted in suspected serious injuries; both occurred at the N 9th Avenue / Rose Street intersection. One suspected serious injury incident involved a vehicle striking a pedestrian, and the other involved a vehicle sideswiping another that was stopped. The City has prioritized this intersection within its *Local Road Safety Plan* (see References) and has implemented at least two traffic improvement projects within recent years to address safety concerns.

The Myra Road / C Street / Poplar Street intersection has a collision rate that merits further investigation. Although the collision rate is very approximate based on uncertainty of the traffic volumes, the collision data show a clear pattern of rear-end incidents. These collisions are distributed on all four approaches with slightly more on the westbound Poplar Street approach. Rear-end crashes can often be addressed with signal retiming, especially clearance interval timing (yellow and all red signal timing). The City's Poplar Street lane restriping project may address the crashes on Poplar Street, and the City should continue to monitor the crash history at the intersection.

Findings: The 2014–2019 collision history at the study intersections was reviewed; all intersections have collision rates lower than the critical rate. The Poplar Street corridor project (currently in the design phase) and the recently completed improvement projects at the N 9th Avenue / Rose Street intersection should address the locations with the most notable crash history. The Myra-Offner Master Plan project will have minor impacts on any of the studied intersections.

Recommendation: The City should continue to monitor crash records at the Myra Road / C Street / Poplar Street intersection and should review the traffic signal timing parameters to assure they minimize the risk of rear-end collisions.

4.5 Pedestrian, Bicycle, and Transit Facilities

4.5.1 Existing Facilities

Most roadways within the study area have sidewalks or off-street paths for pedestrians. By contrast, on-street bike lanes currently do not exist along both sides of the several studied roadways, as noted in Table 2.

Transit services are provided by Valley Transit. Four bus routes serve roadways near the Konen site:

- 1 – Mainline travels along Rose Street in both directions between College Avenue in the City of College Place and N 9th Avenue in the City of Walla Walla.
- 6 – VA / Medical Loop travels southwest along The Dalles Military Road from S 9th Avenue, north on Myra Road, and east on Poplar Street.
- 9 – Pine Street Loop travels south along Myra Road from Dell Avenue and east along Pine Street to N 2nd Avenue.
- West Loop travels east along Rose Street from College Avenue to Avery Street and south on Avery Street to Poplar Street. It also travels southwest along The Dalles Military Road from S 9th Avenue and continues southwest along 12th Street to Larch Avenue.

The nearest bus stops to the Konen site are located

- Along Rose Street at the Offner Road and Avery Street intersections
- Along eastbound Pine Street east of Myra Road
- Along Poplar Street near the Avery Street intersection

These bus stops are considered to be within walking distance for most, if not all, of the proposed Konen master plan developments.

4.5.2 Proposed Conditions

The LOS analyses above demonstrate that there are no capacity issues to mitigate at the Offner Road / Rose Street or Avery Street / Rose Street intersections. There are potential opportunities for safety improvements in the vicinity, however, and safety and/or neighborhood mitigations are required based on the project's traffic impacts on Offner Road and Avery Street. Incomplete pedestrian infrastructure along Offner Road (with a gap at the Columbia-Walla Walla Railway crossing) and Avery Street (with no infrastructure) represent significant gaps in the pedestrian network that could serve the Konen site developments. To mitigate the impacts to pedestrian safety, the following safety improvements are recommended:

- Complete the pedestrian network along Offner Road to connect nearby existing paths across the Columbia-Walla Walla Railway crossing. This will complete the pedestrian gap between the Konen site and Rose Street.
- Complete the pedestrian network along Avery Street to provide a sidewalk along the west side of the roadway between the Konen project (237 Avery Street) and Rose Street. This will include a pedestrian crossing across the Columbia-Walla Walla Railway and will complete the pedestrian gap between the Konen site and Rose Street.

The specific mitigations should be based on proportionate share contributions by the Konen development. Following the proportionate share methodology provided by the City, and using cost estimates for the pedestrian rail crossings (provided by the City) and for the sidewalk (estimated from WSDOT unit bid analyses), the Konen project should contribute approximately:

- 99%, or $16,000, for the pedestrian rail crossing at Offner Road
- 100%, or $101,300, for the sidewalk along the west side of Avery Street
- 100%, or $16,200, for the pedestrian rail crossing at Avery Street

Details of the proportionate share calculations are provided in Appendix F.

With the proposed development, sidewalks will be constructed along the internal streets, and new sidewalks will be connected to existing sidewalks (where they exist) along Futura Road, Myra Road, Offner Road, Artesia Avenue, and Avery Street.

Findings: Sidewalks, bike lanes, and off-street paths are available along several roadways within the study area. Current pedestrian infrastructure has gaps along Offner Road and Avery Street between the Konen site and Rose Street, most notably at the Columbia-Walla Walla Railway crossings. To fill in these gaps, the project impacts on the Offner Road pedestrian rail crossing represent 99% of its cost. The project impacts on the Avery Street sidewalk and pedestrian rail crossing represent 100% of their cost. The development will construct new pedestrian and/or bicycle facilities along internal streets, connecting to current facilities where they exist and anticipating future connections.

Recommendations: Complete the pedestrian pathway connection along Offner Road across the Columbia-Walla Walla Railway crossing. Complete the pedestrian connection along Avery Street between the Konen site and Rose Street, including across the Columbia-Walla Walla Railway. These improvements should be considered safety mitigations for the increased traffic volumes generated by the Myra-Offner Master Plan developments. Installation of pedestrian improvements should be made on a proportionate share basis, totaling $133,500 for the entire of the Myra-Offner Master Plan.

Recommendations: Assure all driveways, sidewalks, and curb ramps constructed with the Konen site developments comply with current Americans with Disabilities Act (ADA) guidelines.

The Myra Road / Futura Road intersection currently has marked crosswalks on all four approaches. The stop-controlled eastbound and westbound approaches are a low risk for pedestrians. The crosswalks on the northbound and southbound approaches pose a moderate risk for pedestrians due to the number of lanes and the distance across Myra Road, as well as the traffic speed and volume. In 2040 the volumes on Myra Road are projected to be approximately 9,000 to 9,500 vehicles per day. The speed limit is 35 mph and crossing distance is approximately 66 feet with two through lanes and left-turn lanes in each direction on Myra Road. The intersection appears well lighted with four streetlights near the intersection. Pedestrian counts were not tabulated for this TIA, but with no pedestrian generators or destinations currently existing near this intersection, pedestrian crossings of Myra Road are estimated to be infrequent.

Nearby pedestrian crossings include:

- At the Myra Road / Electric Avenue intersection (illuminated and signalized)
- On each side of Mill Creek (one illuminated only, the other providing illumination, a refuge median, and actuated overhead beacons)
- At the Myra Road / Heritage Road / Pine Street intersection (illuminated and a roundabout)

Even with build-out of the Konen site, pedestrian crossings of Myra Road are unlikely to increase given the established nearby crossings and the absence of other pedestrian generators or destinations. Based on Table 1 of the Federal Highway Administration's (FHWA) *Guide for Improving Pedestrian Safety* (see References), additional countermeasures are suggested at the Myra Road / Futura Road intersection to reduce risk to pedestrians in the future conditions. This intersection should continue to be monitored for traffic volumes. If north-south through volumes increase, then advance stop bars and warning signs should be added to enhance the crosswalks across Myra Road.

Finding: No pedestrian improvements are necessary currently at the Myra Road / Futura Road intersection, but if traffic volumes increase along Myra Road, then additional improvements are suggested.

Recommendation: The City should continue to monitor the Myra Road / Futura Road intersection for increasing through traffic on Myra Road. If north-south traffic increases, then install advance stop bars and warning signs on Myra Road.

The Offner Road / Rose Street and Avery Street / Rose Street intersections have no marked crosswalks but are considered a moderate risk to pedestrians crossing Rose street given its four-lane undivided cross section and the presence of transit service. With the build-out of the Konen site, pedestrian traffic is likely to increase due to the availability of transit service and the proximity of the Blue Mountain Mall as a regional retail destination. The City's *Comprehensive Plan* (see References) proposes the study of multimodal improvements on Rose Street (projects FS-77a and MM-77b) that likely will include restriping Rose Street to a three-lane cross section with bike lanes. This cross section will significantly reduce risk for pedestrians based the FHWA's *Guide for Improving Pedestrian Safety*, and earlier sections of this TIA discussed the Konen project's recommended contributions to the Rose Street corridor project.

It is recommended to further mitigate the Konen project impacts by contributing to the design and construction of curb ramps and pedestrian refuge islands at the Offner Road / Rose Street and Avery Street /

Rose Street intersections. These enhancements will further reduce risk to pedestrians crossing Rose Street. Using the proportionate share methodology provided by the City (detailed in Appendix F), it is recommended that the project impacts represent 81% of the improvement costs at Offner Road plus 79% of the improvement costs at Avery Street. Using an approximate cost estimate of $25,000 for each intersection (assuming two curb ramps and one refuge island at each), it is recommended the Konen project contribute $40,000 toward these future improvements to be constructed with the Rose Street corridor improvements. Details of the proportionate share calculations are provided in Appendix F.

Findings: Crossing Rose Street at Offner Road or Avery Street is considered a moderate risk for pedestrians, and pedestrian traffic is likely to increase with the Konen site developments. The City's programmed multimodal improvements are expected to include restriping Rose Street to a three-lane cross section, which will significantly reduce risk for pedestrians. The risks may be further mitigated by construction of curb ramps and median refuge islands within Rose Street at the two intersections. The Konen project impacts represent 81% of the improvement costs at Offner Road plus 79% of the improvement costs at Avery Street.

Recommendation: The City should design and construct two curb ramps and a pedestrian refuge island at the Offner Road / Rose Street intersection and at the Avery Street / Rose Street intersection as part of the Rose Street corridor improvements project. Contributions should be made on a proportionate share basis, totaling $40,000 for the entire of the Myra-Offner Master Plan.

4.6 Intersection Sight Distance

ISD measurements were made by PBS staff at the three roadways providing access to the Konen Myra-Offner Master Plan. ISD was found to be adequate at their stop-controlled approaches to the nearby arterial roadways, namely at westbound Futura Road approaching Myra Road, at southbound Offner Road approaching Rose Street, and at southbound Avery Street approaching Rose Street. Specific site distance measurements were taken at the following locations:

- From Futura Road:
  - Looking right on Myra Road for southbound traffic (i.e., preparing to make a left turn): unobstructed view for at least 440 feet, the minimum stipulated for this location and condition by the American Association of State Highway and Transportation Officials, (AASHTO, see References)
  - Looking left on Myra road for northbound traffic (i.e., preparing to make a right turn): unobstructed view for at least 335 feet, the minimum stipulated for this location and condition by AASHTO
- From Offner Road:
  - Looking right on Rose Street for eastbound traffic (i.e., preparing to make a left turn): unobstructed view for at least 415 feet, the minimum stipulated for this location and condition by AASHTO
  - Looking left on Rose Street for westbound traffic (i.e., preparing to make a right turn): unobstructed view for at least 335 feet, the minimum stipulated for this location and condition by AASHTO

- From Avery Street:
    - Looking right on Rose Street for eastbound traffic (i.e., preparing to make a left turn): unobstructed view for at least 340 feet, and unobstructed view at 415 feet, the minimum stipulated for this location and condition by AASHTO, but with partial obstruction by a mature street tree in between those distances
    - Looking left on Rose Street for westbound traffic (i.e., preparing to make a right turn) : unobstructed view for at least 335 feet, the minimum stipulated for this location and condition by AASHTO

Although the view of eastbound traffic from Avery Street is partially obstructed between 340 feet and 415 feet, the view is adequate at 415 feet, and the available distance exceeds the minimum stopping sight distance (AASHTO recommends 250 feet minimum for 35 mph). Furthermore, the view angle will improve slightly with the expected lane conversion along Rose Street. For these reasons, ISD is deemed adequate at Avery Street as well as at Futura Road and Offner Road.

It is recommended the internal roadway network, intersections, and site accesses be designed in accordance with AASHTO policy for ISD. Install no objects within the ISD triangles that would block approaching drivers' views of approaching traffic.

Finding: Adequate ISD is available on the stop-controlled approaches at the three access intersections: Myra Road / Futura Road, Offner Road / Rose Street, and Avery Street / Rose Street.

Recommendation: Design the proposed internal roadway network, intersections, and site accesses in accordance with guidelines presented in Chapter 9.5 of the AASHTO *Geometric Design* policy for ISD. Install no objects within the ISD triangles that would block approaching drivers' views of approaching traffic.

5 STUDY FINDINGS

The findings of this TIA are listed below.

5.1 Present Volumes Are Estimated

Because of the ongoing COVID-19 pandemic temporarily closing schools and multiple businesses, present intersection traffic volumes were estimated based on historical data rather than by counting existing volumes. This approach was agreed to in negotiation with staff from the City and DKS Associates.

Historical data available at study area intersections indicate a growth rate of 2.5% (annually compounded), so for locations where historical data were available, past volumes were increased by 2.5% (annually compounded) to estimate April 2020 volumes.

Comparisons between current counts and present projections (based on 2.5% growth) at select study area intersections indicate the COVID-19 pandemic has depressed volumes by approximately 30% across the study area. So, for locations where historical data were unavailable, current counts were increased by 30% to estimate April 2020 volumes.

To apply a level of uniformity to the study, intersection approach volumes were balanced along the Myra Road and Rose Street corridors, using the estimated April 2020 volumes at the Myra Road / Rose Street intersection as a fixed reference. These balanced volumes and the unadjusted volumes at isolated intersections were used as the 2020 baseline volumes for this study.

5.2 Future Traffic Volumes Increase

Traffic volumes in the study area will continue to increase without or with the project. Generic background growth (at 1% for 5 years) was assumed to add approximately 5.1% to the 2020 baseline volumes to estimate 2025 Without Project volumes. Generic background growth (at 1% for 20 years) was assumed to add approximately 22.0% to the 2020 baseline volumes to estimate 2040 Without Project volumes.

5.3 Access and Circulation

Futura Road, Offner Road, and Avery Street are assumed as the three access points into and out of the site. An internal local roadway network will be developed to serve the various uses proposed. Pedestrian connections will be provided between the public rights-of-way and the proposed development. The Myra-Offner Master Plan will support the future extension of Electric Avenue to Offner Road with right-of-way dedication and improvements.

5.4 Trip Generation

Including all land uses and all development phases, the Myra-Offner Master Plan is anticipated to generate 438 net new vehicle trips during the AM peak hour and 358 net new trips during the PM peak hour. In addition, the Myra-Offner Master Plan is anticipated to generate 74 internal trips and 227 pass-by trips during the AM peak hour, and 86 internal trips and 134 pass-by trips during the PM peak hour.

5.5 Peak Hour Signal Warrant

The peak hour signal warrant was not met at the Myra Road / Futura Road intersection in the 2040 With Project conditions for either the AM or PM peak hour.

5.6 Intersection Operations

In all analysis scenarios, both without and with project conditions, all except one studied intersection will operate at an acceptable LOS during both the weekday AM and PM peak hours. The exception is the Myra

Road / Futura Road intersection, which will operate at LOS F for westbound left-turn lane in the 2040 With Project scenario during the AM peak hour. This intersection fails due to background growth on Myra Road. Alternate routes (Offner Road in the near term plus Electric Avenue in the long term) are available, and signal warrants are not met, so no mitigation is not required or recommended.

The completion of the Electric Avenue from Myra Road to Offner Road. will reduce the traffic volume of left turns from westbound Furtura Road.

5.7 Volumes on Adjacent Collector and Local Roadways

Trips generated by the Konen Myra-Offner Master Plan will impact Offner Road and Avery Street with increases ranging from 15% to 392%. Two segments meet or exceed the City's 25% threshold for recommending mitigation measures: Offner Road north of Rose Street and Avery Street north of Rose Street.

5.8 Left-Turn Lane Evaluations

Eastbound Rose Street will meet the criteria for further consideration of a left-turn lane at both Offner Road and Avery Street based on the 2025 With Project conditions. Left-turn lanes are expected to be incorporated within a future lane conversion improvement along Rose Street, and proportionate contributions by the Myra-Offner Master Plan projects are appropriate. For the affected segments of Rose Street, the project impacts on the corridor's left-turn lanes represent 6.0% at Offner Road plus 5.5% at Avery Street.

5.9 Right-Turn Lane Evaluations

Although the Myra Road / Futura Road intersection volumes from the 2025 With Project meet the WSDOT criteria to consider a northbound right-turn lane, no other factors recommend its implementation. No right-turn lanes are recommended with the project.

5.10 Collision Analysis

The 2014–2019 collision history at the study intersections was reviewed; all intersections have collision rates lower than the critical rate. The Poplar Street corridor project (currently in the design phase) and the recently completed improvement projects at the N 9th Avenue / Rose Street intersection should address the locations with the most notable crash history. The Myra-Offner Master Plan project will have minor impacts on any of the studied intersections.

5.11 Transit, Pedestrian, and Bicycle Facilities

Sidewalks, bike lanes, and off-street paths are available along several roadways within the study area. Current pedestrian infrastructure has gaps along Offner Road and Avery Street between the Konen site and Rose Street, most notably at the Columbia-Walla Walla Railway crossings. To fill in these gaps, the project impacts on the Offner Road pedestrian rail crossing represent 99% of its cost. The project impacts on the Avery Street sidewalk and pedestrian rail crossing represent 100% of their cost.

The development will construct new pedestrian and/or bicycle facilities along internal streets, connecting to current facilities where they exist and anticipating future connections.

No pedestrian improvements are necessary currently at the Myra Road / Futura Road intersection, but if traffic volumes increase along Myra Road, then additional improvements are suggested.

Crossing Rose Street at Offner Road or Avery Street is considered a moderate risk for pedestrians, and pedestrian traffic is likely to increase with the Konen site developments. The City's programmed multimodal improvements are expected to include restriping Rose Street to a three-lane cross section, which will

significantly reduce risk for pedestrians. The risks may be further mitigated by construction of curb ramps and median refuge islands within Rose Street at the two intersections. The Konen project impacts represent 81% of the improvement costs at Offner Road plus 79% of the improvement costs at Avery Street.

5.12 Intersection Sight Distance

Adequate ISD is available on the stop-controlled approaches at the three access intersections: Myra Road / Futura Road, Offner Road / Rose Street, and Avery Street / Rose Street.

6 RECOMMENDATIONS

The traffic impact analysis supports the following recommendations.

6.1 Traffic Impact Mitigation

Negotiate acceptable mitigation improvements for Offner Road and Avery Street with City staff. This report recommends proportionate share contributions, as described below, to address the project impacts.

The full roadway width of right-of-way should be dedicated for the extension of Electric Avenue from Offner Road to the western property line of the site.

6.2 Left-Turn Lanes on Rose Street

Contribute to the Rose Street corridor lane conversion project: $130,300 assuming plastic pavement markings are selected.

6.3 Collision Mitigation

The City of Walla Walla should continue to monitor crash records at the Myra Road / C Street / Poplar Street intersection and should review the traffic signal timing parameters to assure they minimize the risk of rear-end collisions.

6.4 Pedestrian Safety Connections Along Offner Road and Avery Street

Contribute $16,000 toward connecting the pedestrian pathway connection along Offner Road across the Columbia-Walla Walla Railway crossing.

Contribute to completing the pedestrian connection along Avery Street between the Konen site and Rose Street, including across the Columbia-Walla Walla Railway: $101,300 for the sidewalk plus $16,200 for the pedestrian rail crossing.

6.5 Accessibility

Assure all driveways, sidewalks, and curb ramps constructed with the development projects comply with current ADA guidelines.

6.6 Pedestrian Crosswalks of Myra Road at Futura Road

Future development projects adding trips to Futura Road should monitor the LOS operations and signal warrant thresholds at Myra Road / Futura Road intersection. The City should pursue the completion of the Electric Avenue from Myra Road to Offner Road.

6.7 Pedestrian Crosswalks of Rose Street

The City should design and construct two curb ramps and a pedestrian refuge island at the Offner Road / Rose Street intersection and at the Avery Street / Rose Street intersection as part of the Rose Street corridor improvements project. The Konen project should contribute on a proportionate share basis, totaling $40,000.

6.8 Intersection Sight Lines

Design the proposed internal roadway network, intersections, and site accesses in accordance with guidelines presented in Chapter 9.5 of the AASHTO *Geometric Design* policy (see References) for ISD. Install no objects within the ISD triangles that would block approaching drivers' views of approaching traffic.

6.9 Proportionate Share Contributions

Taking the sum of all the proportionate share contribution recommendations, the total project contribution—pending adjustments to the mitigation cost estimates—is $303,800. It is recommended to assess this total based on the number of primary trips generated by each portion of the overall development as it is permitted. Each of the 358 primary trips generated in the weekday PM peak hour would be assessed $850. Taking this approach will require careful apportionment of the internal and pass-by trips so that they are equitably applied for all applicable land uses; this exercise is typically referred to as trip accounting.

7 REFERENCES

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Figures

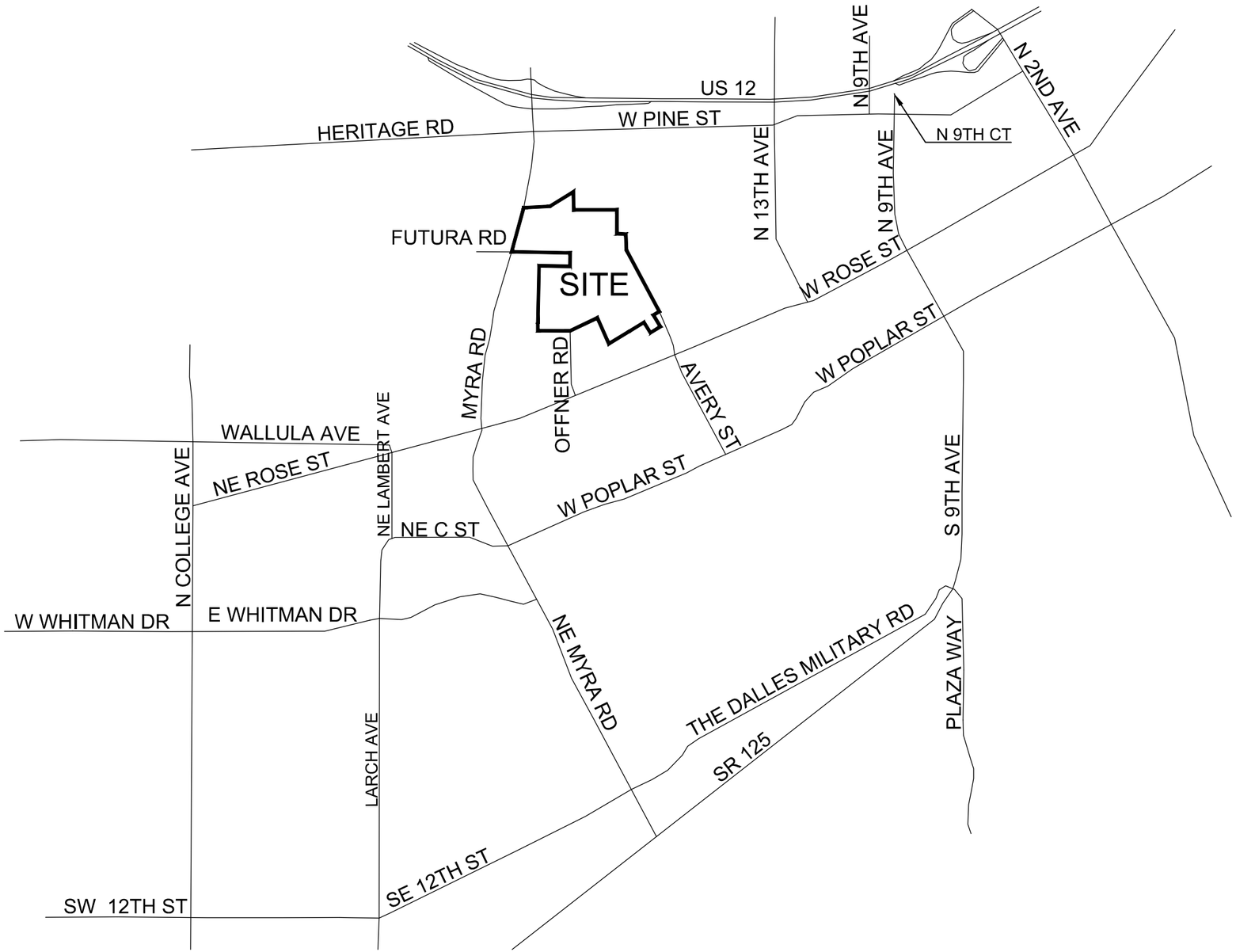


FIGURE 1

Vicinity Map

Konen Myra Road Development

FIGURE 2A

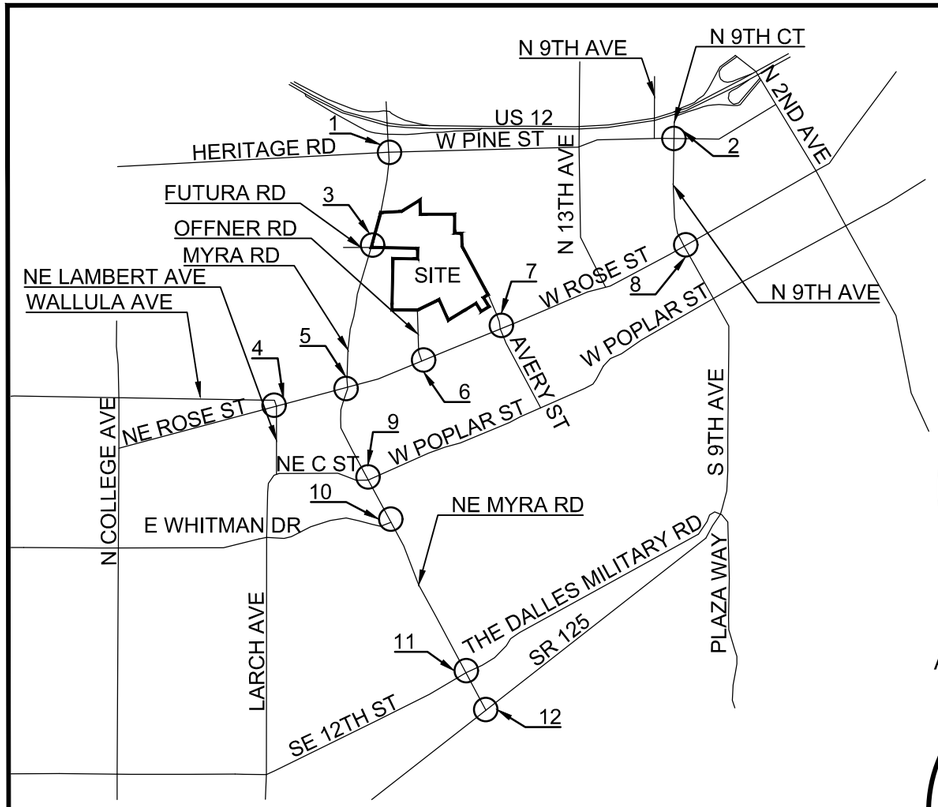
Konen Site Plan

Konen Myra Road Development

FIGURE 2B

Avery Estates Site Plan

Konen Myra Road Development



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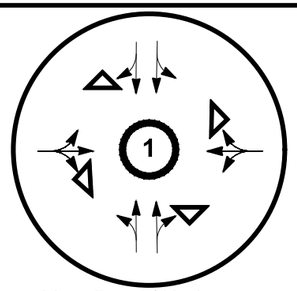
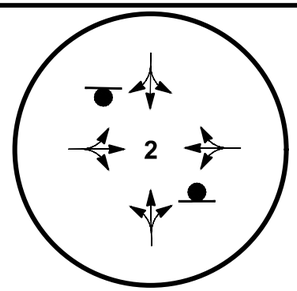
LEGEND

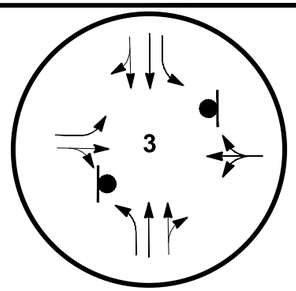
- ROUNDABOUT
- YIELD SIGN
- INTERSECTION
- TRAFFIC SIGNAL
- STOP SIGN



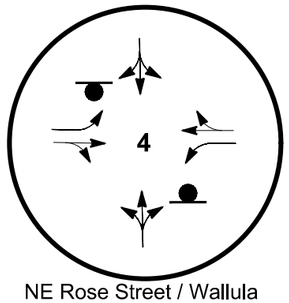
Myra Road / Heritage Road / Pine Street



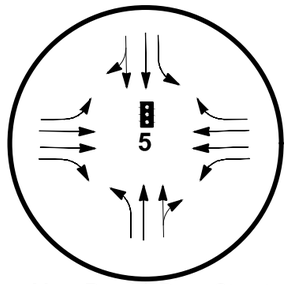
W Pine Street / N 9th Avenue(East) / N 9th Court



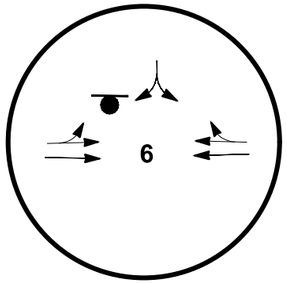
Myra Road / Futura Road



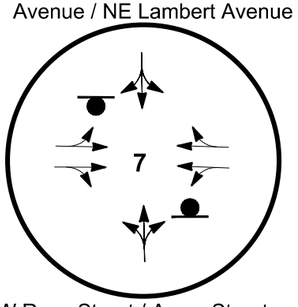
NE Rose Street / Wallula Avenue / NE Lambert Avenue



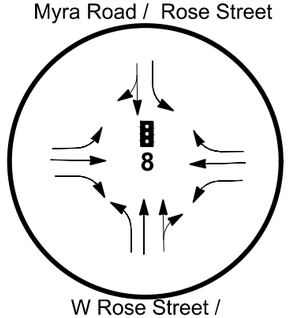
Myra Road / Rose Street



Rose Street / Offner Road



W Rose Street / Avery Street



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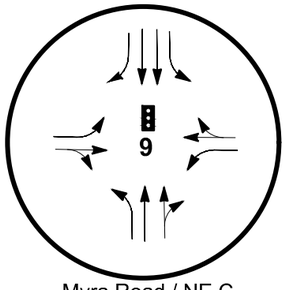
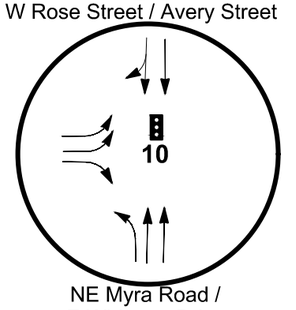


Myra Road / NE C Street / Poplar Street



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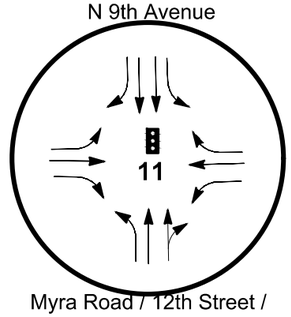
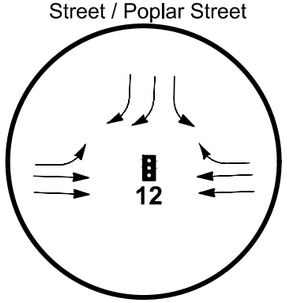


Myra Road / 12th Street / The Dallas Military Road

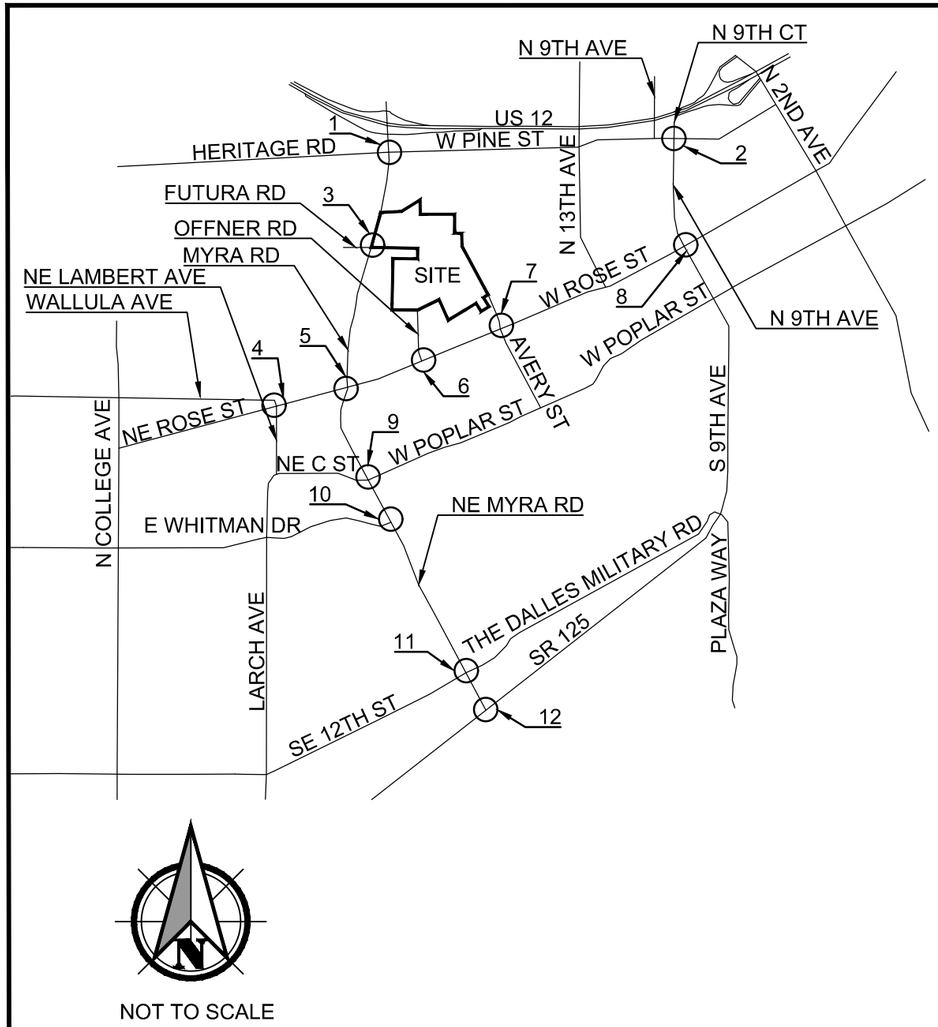


Myra Road / SR 125

FIGURE 3

Existing Lane Configurations and Traffic Controls

Konen Myra Road Development



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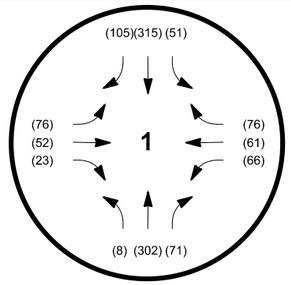
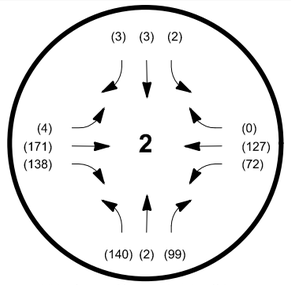
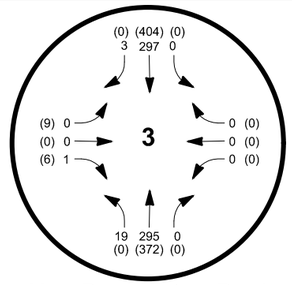


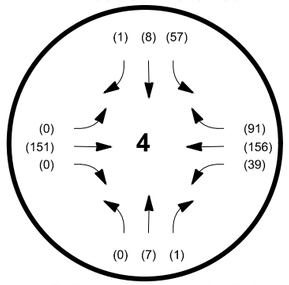
Myra Road / Heritage Road / Pine Street



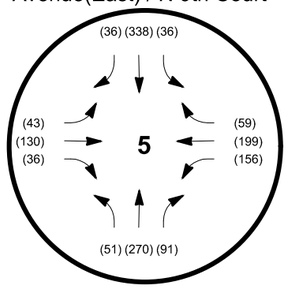
W Pine Street / N 9th Avenue(East) / N 9th Court



Myra Road / Futura Road



NE Rose Street / Wallula Avenue / NE Lambert Avenue



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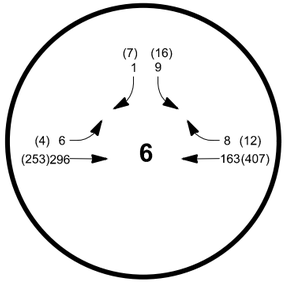
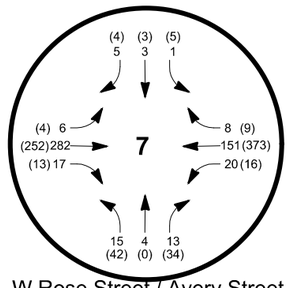
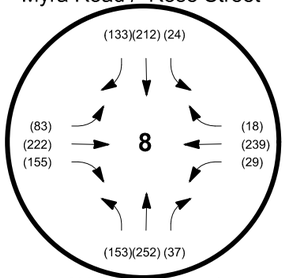


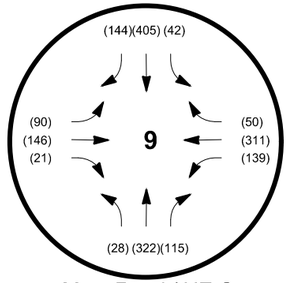
Rose Street / Offner Road



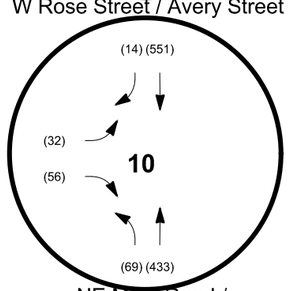
W Rose Street / Avery Street



W Rose Street / N 9th Avenue



Myra Road / NE C Street / Poplar Street



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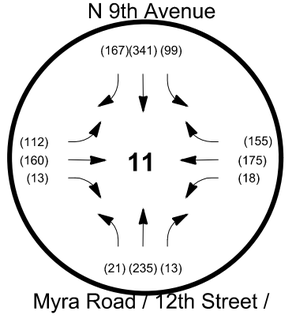
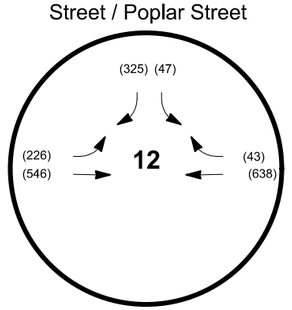


Myra Road / 12th Street / The Dallas Military Road



Myra Road / SR 125

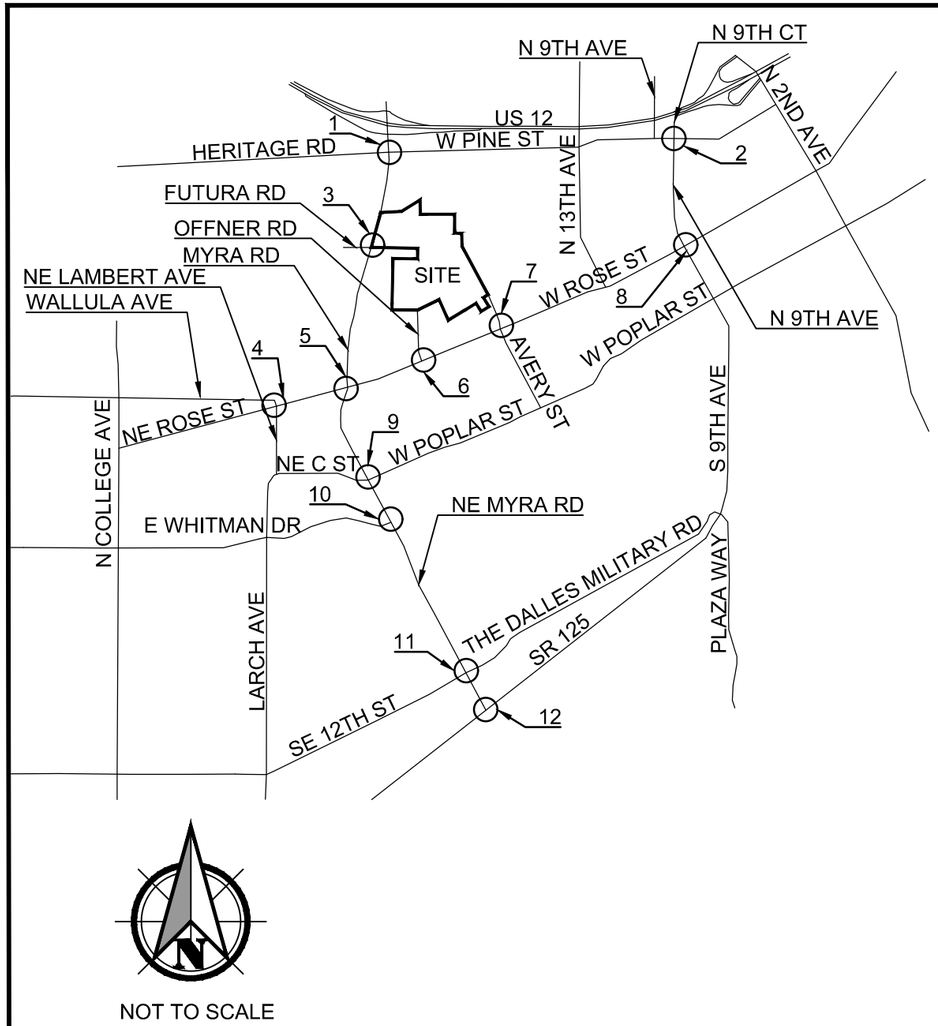
LEGEND

○	INTERSECTION
XXX	AM PEAK HOUR
(XXX)	PM PEAK HOUR

FIGURE 4

2020 Baseline Volumes

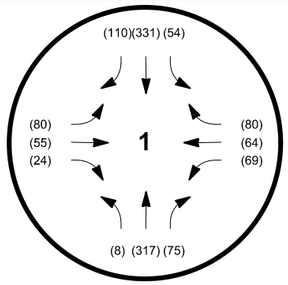
Konen Myra Road Development



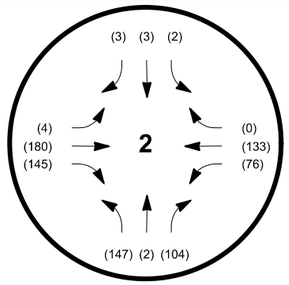
NOT TO SCALE

LEGEND

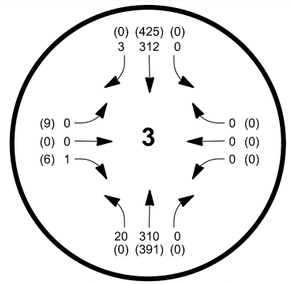
○	INTERSECTION
XXX	AM PEAK HOUR
(XXX)	PM PEAK HOUR



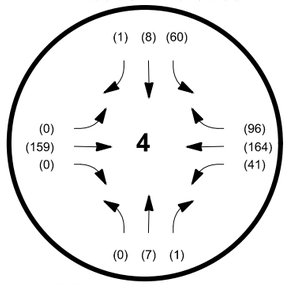
Myra Road / Heritage Road / Pine Street



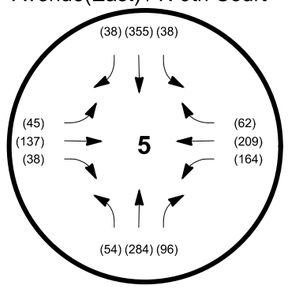
W Pine Street / N 9th Avenue(East) / N 9th Court



Myra Road / Futura Road



NE Rose Street / Wallula Avenue / NE Lambert Avenue



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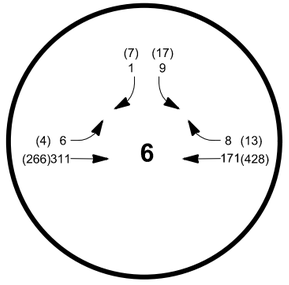

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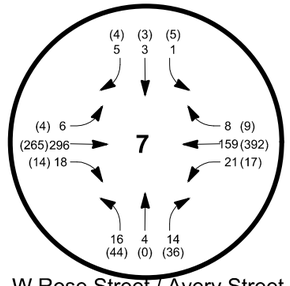
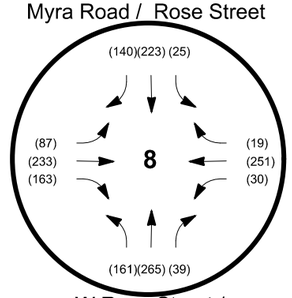


W Rose Street / Avery Street



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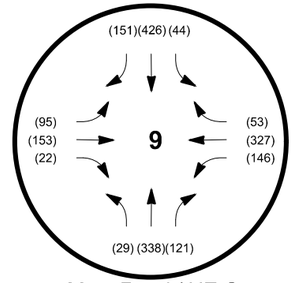
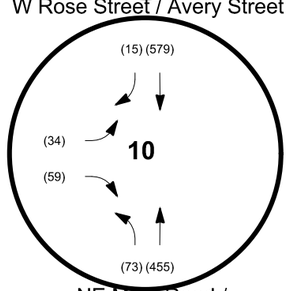
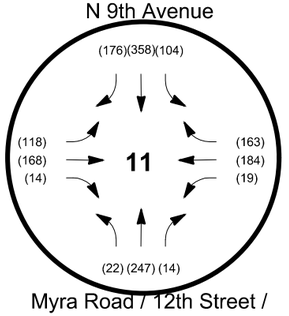


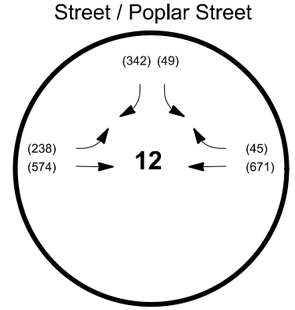
Myra Road / NE C Street / Poplar Street



NE Myra Road / E Whitman Drive



Myra Road / 12th Street / The Dallas Military Road

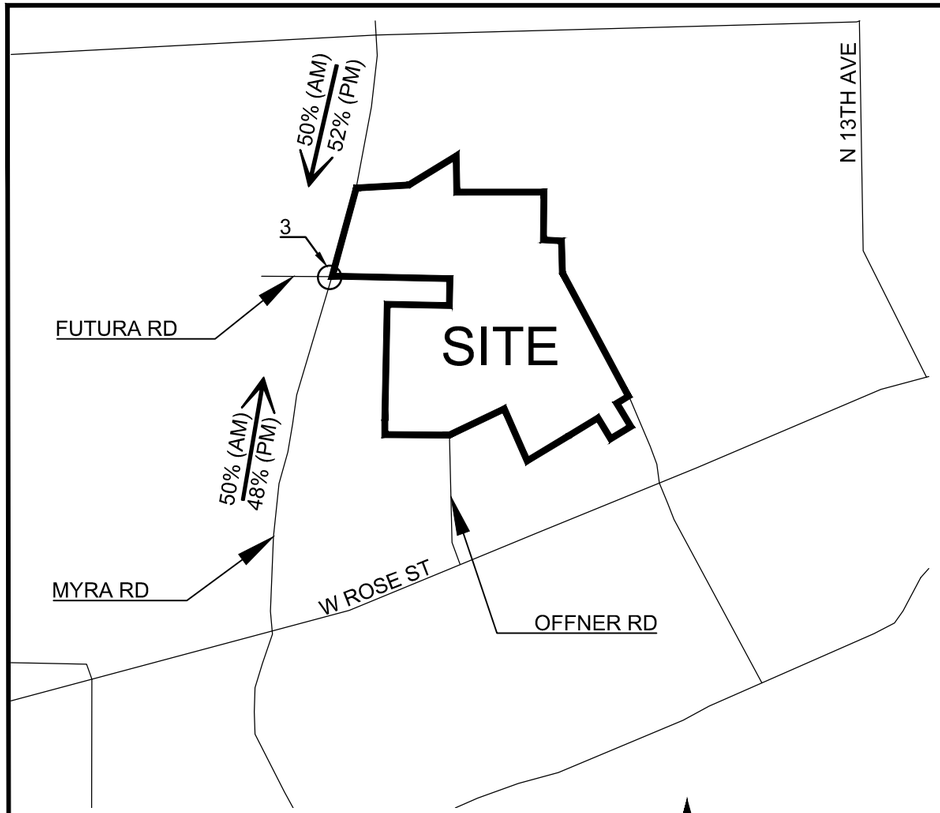


Myra Road / SR 125

FIGURE 5

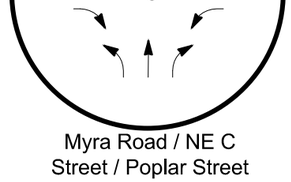
2025 Without Project Volumes

Konen Myra Road Development

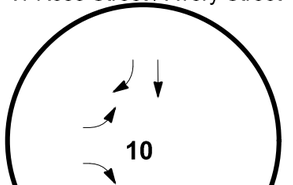


Myra Road / Heritage Road / Pine Street

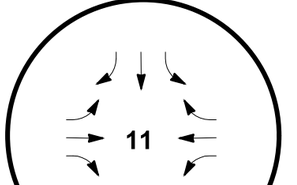
W Pine Street / N 9th Avenue(East) / N 9th Court



Myra Road / Futura Road



NE Rose Street / Wallula Avenue / NE Lambert Avenue



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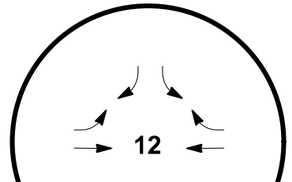
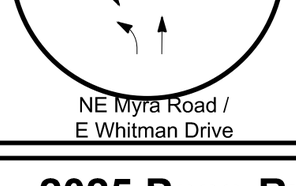


Rose Street / Offner Road



W Rose Street / Avery Street

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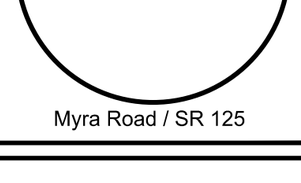
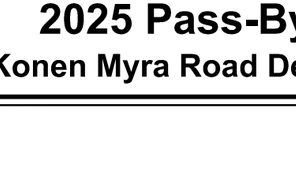
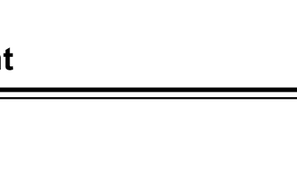


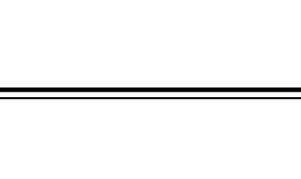
Myra Road / NE C Street / Poplar Street



NE Myra Road / E Whitman Drive



Myra Road / 12th Street / The Dallas Military Road



Myra Road / SR 125

NOT TO SCALE

PASS-BY TRIPS, WEEKDAY AM PEAK HOUR
ENTER = 114
EXIT = 113
TOTAL = 227

PASS-BY TRIPS, WEEKDAY PM PEAK HOUR
ENTER = 67
EXIT = 67
TOTAL = 134

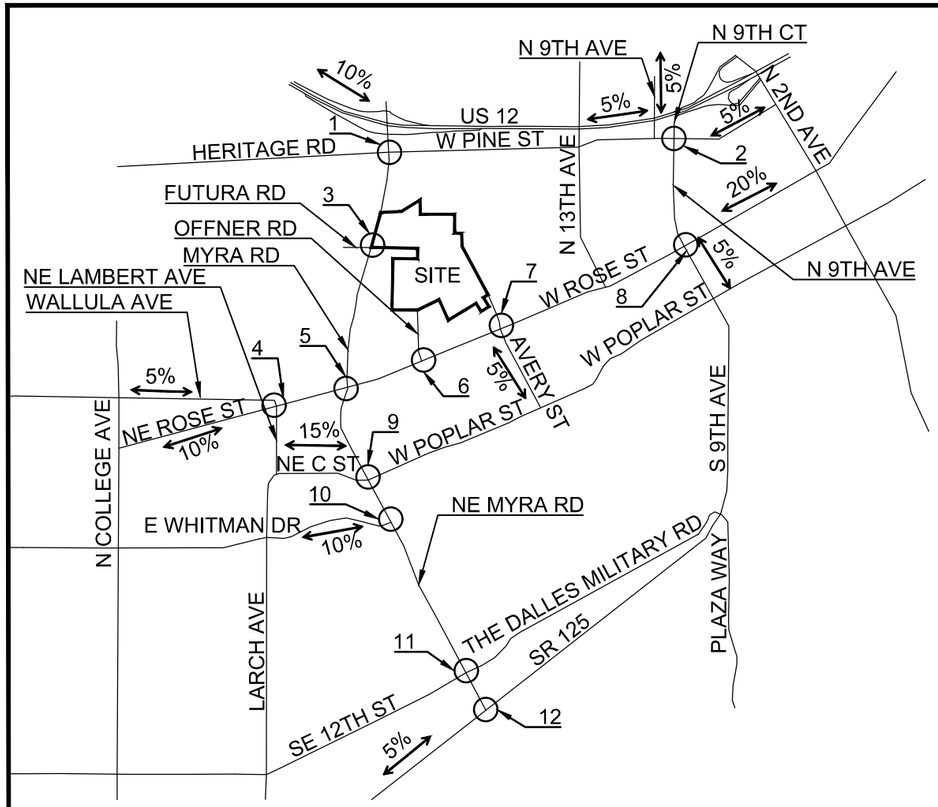
LEGEND

○	INTERSECTION
XXX	AM PEAK HOUR
(XXX)	PM PEAK HOUR

FIGURE 6

2025 Pass-By Trips

Konen Myra Road Development



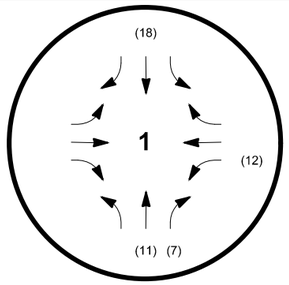
NOT TO SCALE

PRIMARY TRIPS, WEEKDAY AM PEAK HOUR
ENTER = 37
EXIT = 103
TOTAL = 140

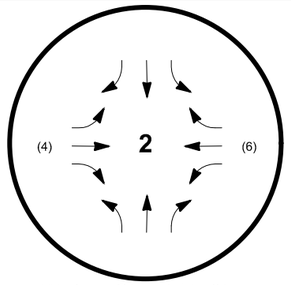
PRIMARY TRIPS, WEEKDAY PM PEAK HOUR
ENTER = 122
EXIT = 71
TOTAL = 193

LEGEND

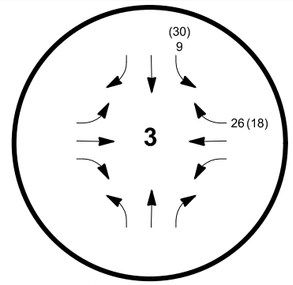
○	INTERSECTION
XXX	AM PEAK HOUR
(XXX)	PM PEAK HOUR



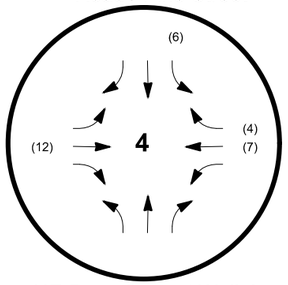
Myra Road / Heritage Road / Pine Street



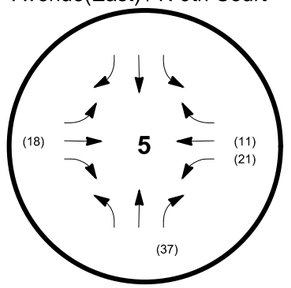
W Pine Street / N 9th Avenue(East) / N 9th Court



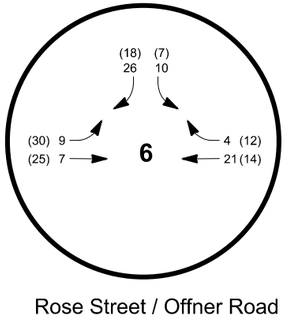
Myra Road / Futura Road



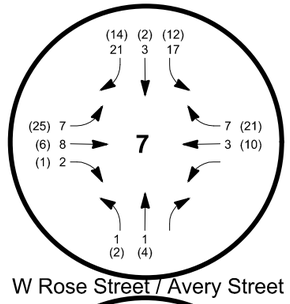
NE Rose Street / Wallula Avenue / NE Lambert Avenue



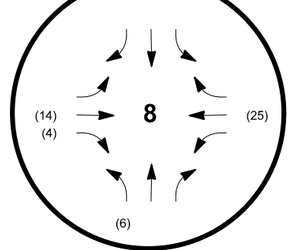
Myra Road / Rose Street



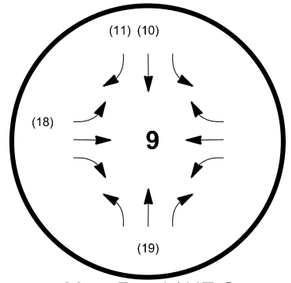
Rose Street / Offner Road



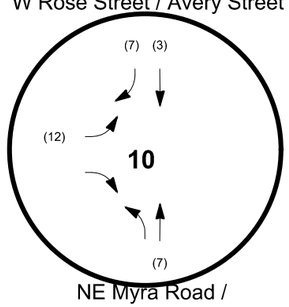
W Rose Street / Avery Street



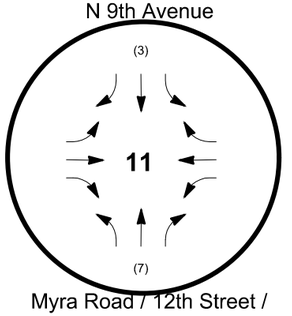
W Rose Street / N 9th Avenue



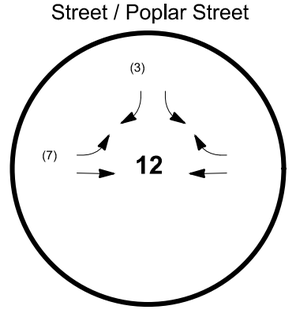
Myra Road / NE C Street / Poplar Street



NE Myra Road / E Whitman Drive



Myra Road / 12th Street / The Dallas Military Road

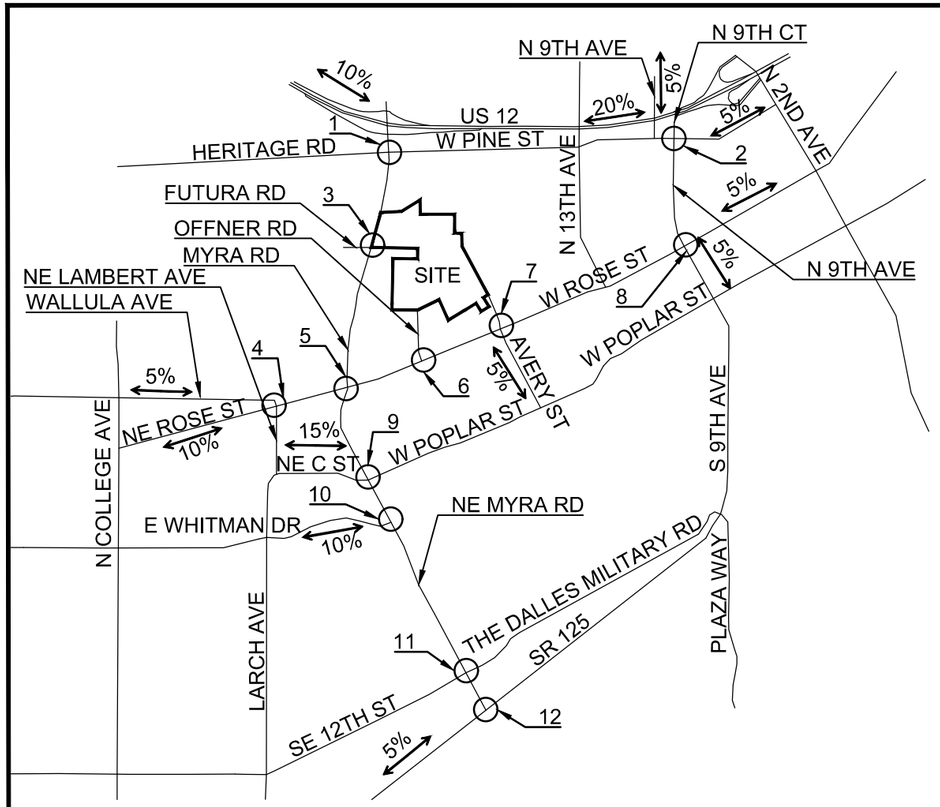


Myra Road / SR 125

FIGURE 7

2025 Primary Trip Distribution and Assignment for Single Family Residential Only

Konen Myra Road Development



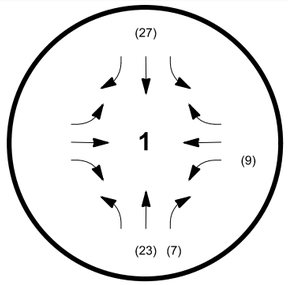
NOT TO SCALE

PRIMARY TRIPS, WEEKDAY AM PEAK HOUR
ENTER = 154
EXIT = 144
TOTAL = 298

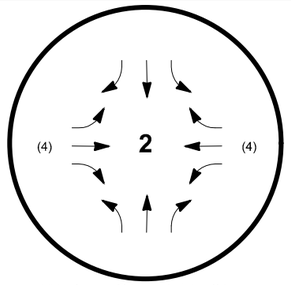
PRIMARY TRIPS, WEEKDAY PM PEAK HOUR
ENTER = 89
EXIT = 76
TOTAL = 165

LEGEND

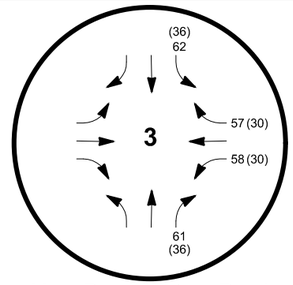
○	INTERSECTION
XXX	AM PEAK HOUR
(XXX)	PM PEAK HOUR



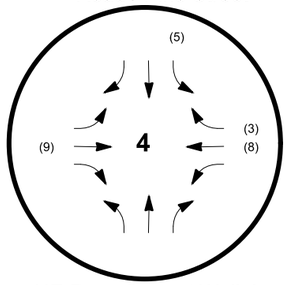
Myra Road / Heritage Road / Pine Street



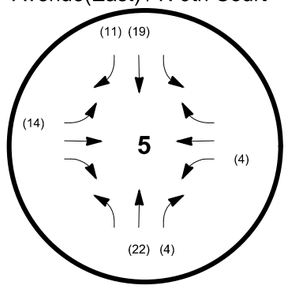
W Pine Street / N 9th Avenue(East) / N 9th Court



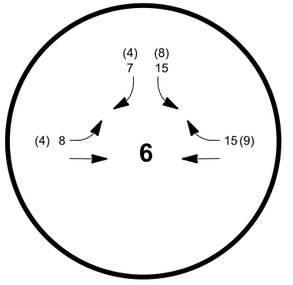
Myra Road / Futura Road



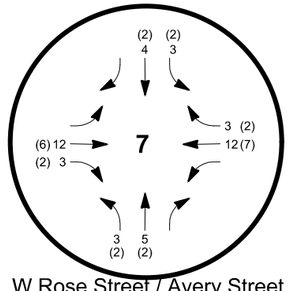
NE Rose Street / Wallula Avenue / NE Lambert Avenue



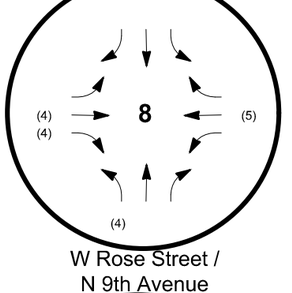
Myra Road / Rose Street



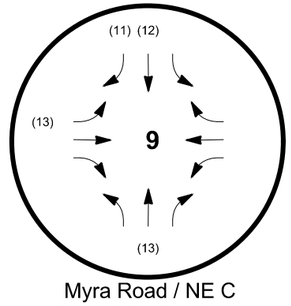
Rose Street / Offner Road



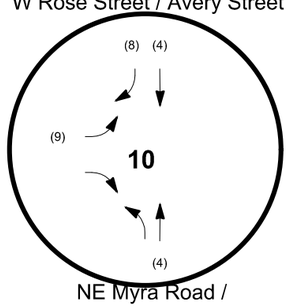
W Rose Street / Avery Street



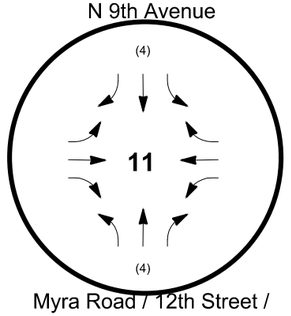
W Rose Street / N 9th Avenue



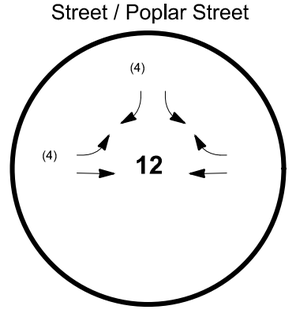
Myra Road / NE C Street / Poplar Street



NE Myra Road / E Whitman Drive



Myra Road / 12th Street / The Dallas Military Road

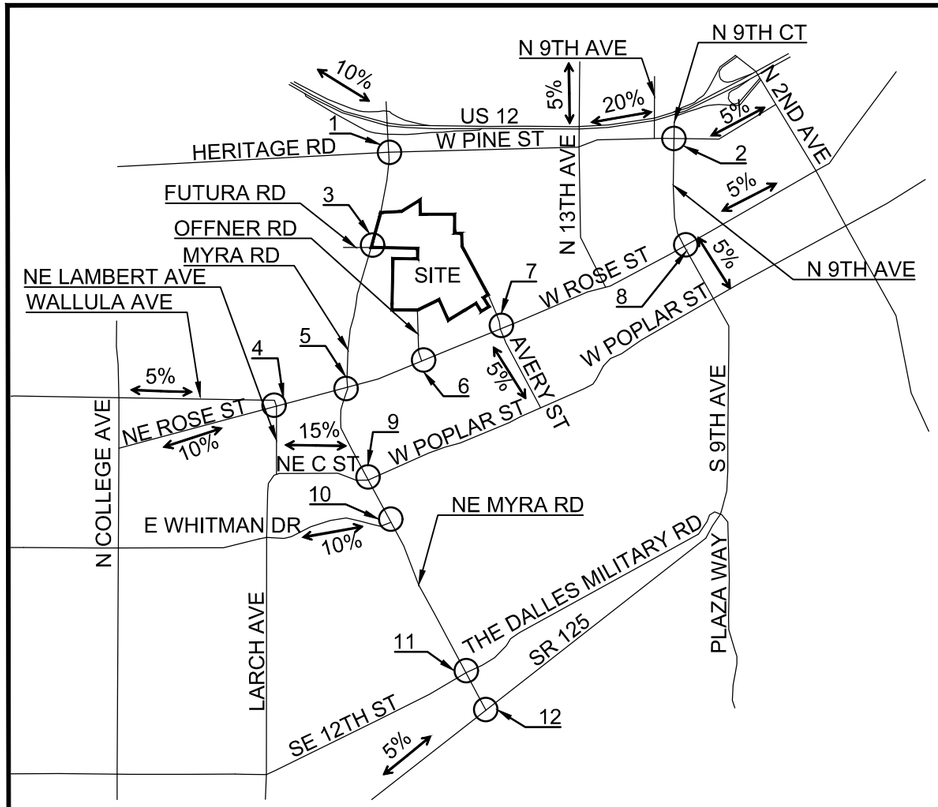


Myra Road / SR 125

FIGURE 8

2025 Primary Trip Distribution and Assignment for Other Uses

Konen Myra Road Development



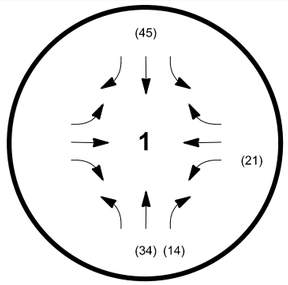
NOT TO SCALE

PRIMARY TRIPS, WEEKDAY AM PEAK HOUR
ENTER =191
EXIT = 247
TOTAL = 438

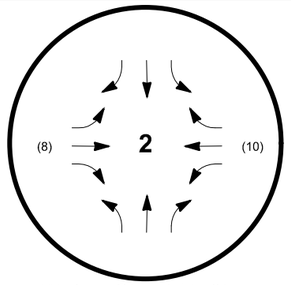
PRIMARY TRIPS, WEEKDAY PM PEAK HOUR
ENTER = 211
EXIT = 147
TOTAL = 358

LEGEND

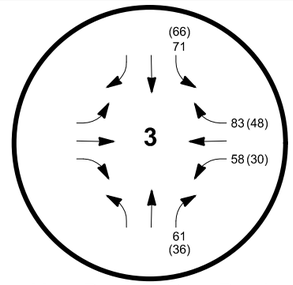
○	INTERSECTION
XXX	AM PEAK HOUR
(XXX)	PM PEAK HOUR



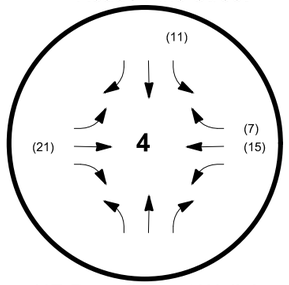
Myra Road / Heritage Road / Pine Street



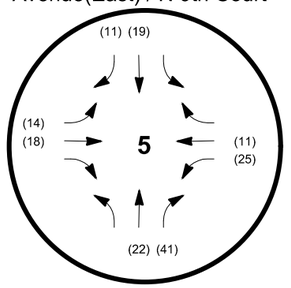
W Pine Street / N 9th Avenue(East) / N 9th Court



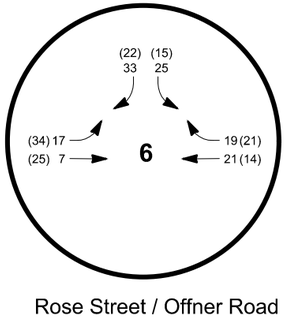
Myra Road / Futura Road



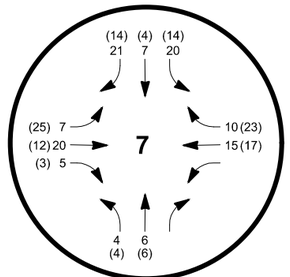
NE Rose Street / Wallula Avenue / NE Lambert Avenue



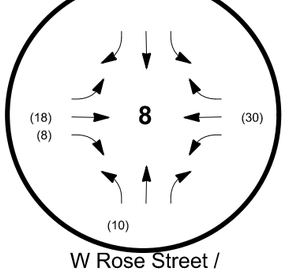
Myra Road / Rose Street



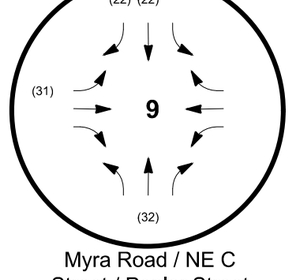
Rose Street / Offner Road



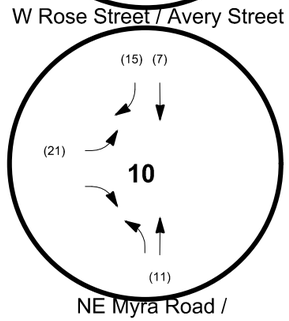
W Rose Street / Avery Street



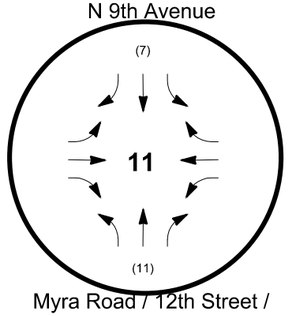
W Rose Street / N 9th Avenue



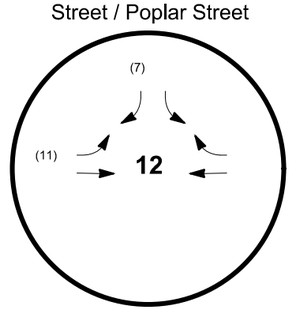
Myra Road / NE C Street / Poplar Street



NE Myra Road / E Whitman Drive



Myra Road / 12th Street / The Dallas Military Road

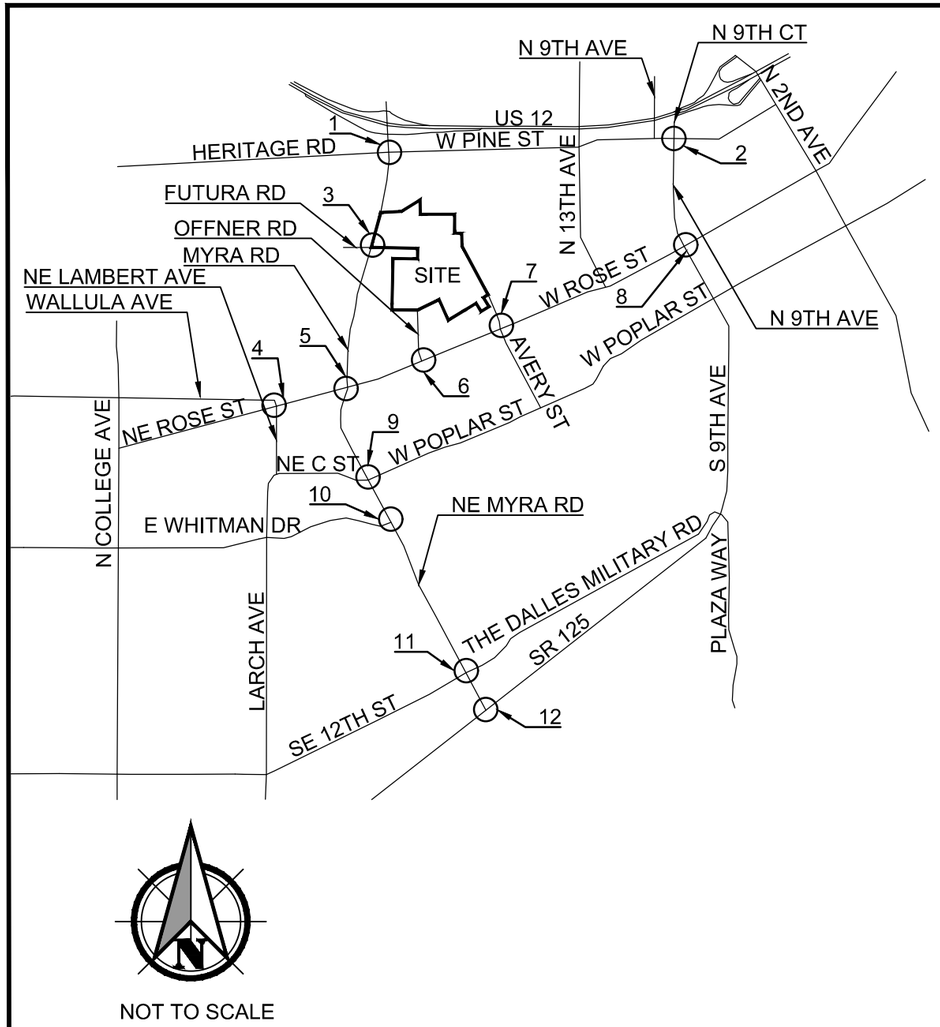


Myra Road / SR 125

FIGURE 9

2025 Total Primary Trip Assignment for All Uses

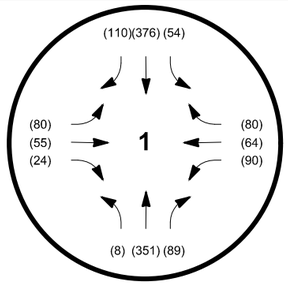
Konen Myra Road Development



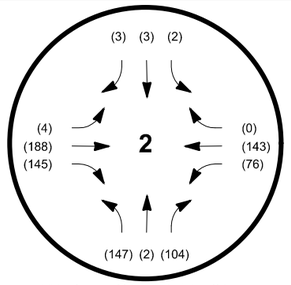
NOT TO SCALE

LEGEND

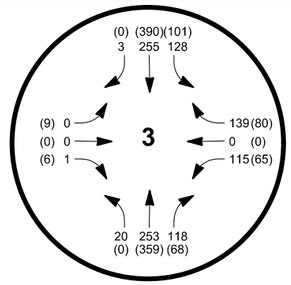
○	INTERSECTION
XXX	AM PEAK HOUR
(XXX)	PM PEAK HOUR



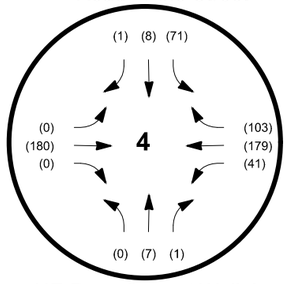
Myra Road / Heritage Road / Pine Street



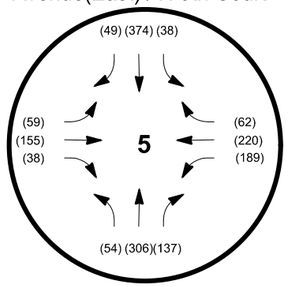
W Pine Street / N 9th Avenue(East) / N 9th Court



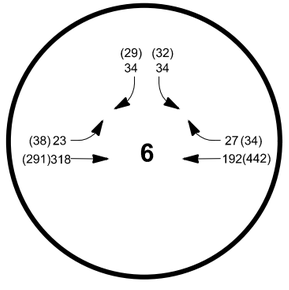
Myra Road / Futura Road



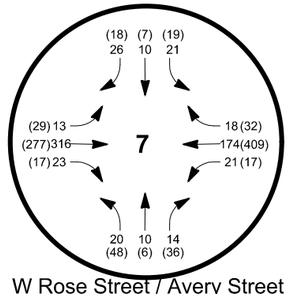
NE Rose Street / Wallula Avenue / NE Lambert Avenue



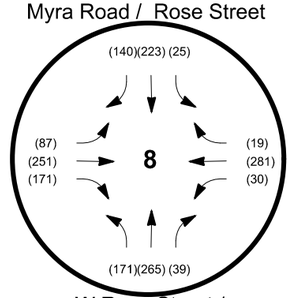
Myra Road / Rose Street



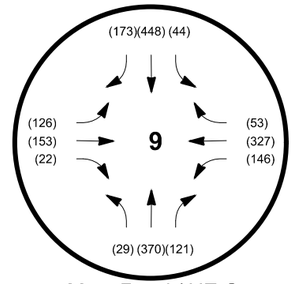
Rose Street / Offner Road



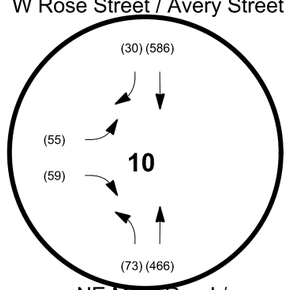
W Rose Street / Avery Street



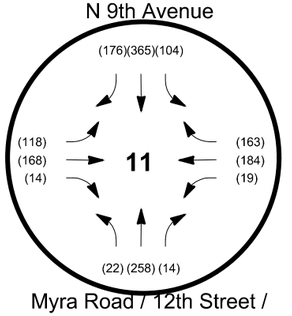
W Rose Street / N 9th Avenue



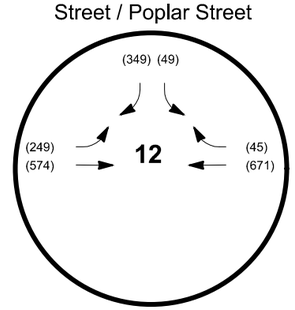
Myra Road / NE C Street / Poplar Street



NE Myra Road / E Whitman Drive



Myra Road / 12th Street / The Dallas Military Road

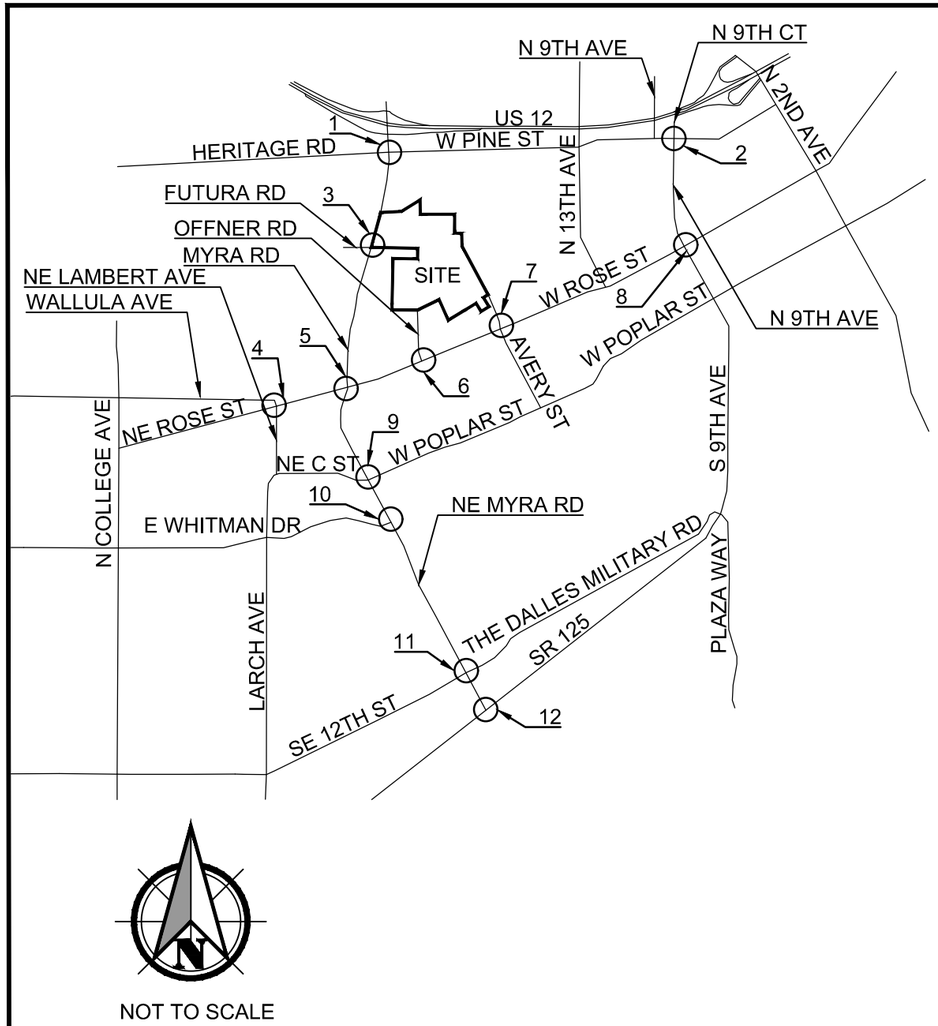


Myra Road / SR 125

FIGURE 10

2025 With Project Volumes

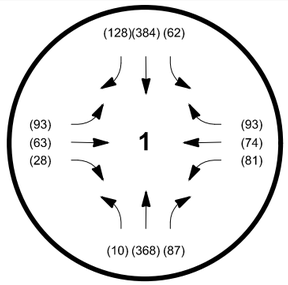
Konen Myra Road Development



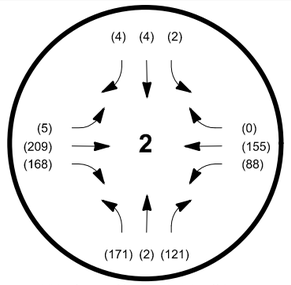
NOT TO SCALE

LEGEND

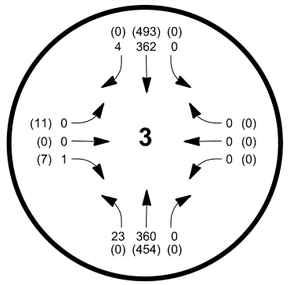
○	INTERSECTION
XXX	AM PEAK HOUR
(XXX)	PM PEAK HOUR



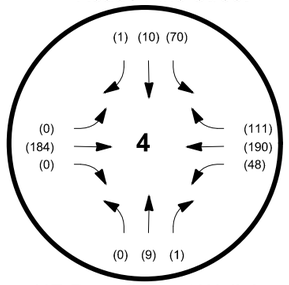
Myra Road / Heritage Road / Pine Street



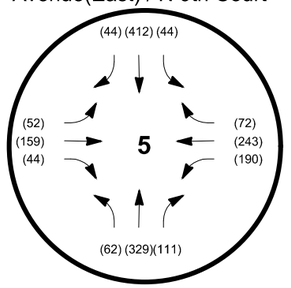
W Pine Street / N 9th Avenue(East) / N 9th Court



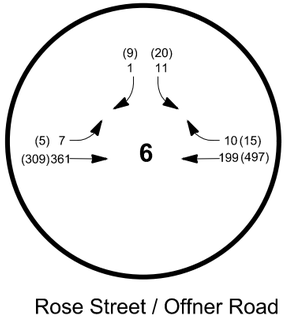
Myra Road / Futura Road



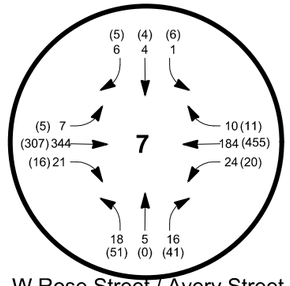
NE Rose Street / Wallula Avenue / NE Lambert Avenue



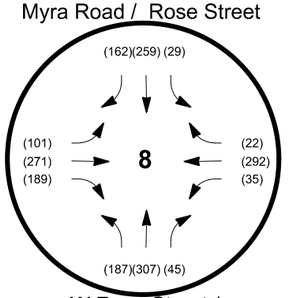
Myra Road / Rose Street



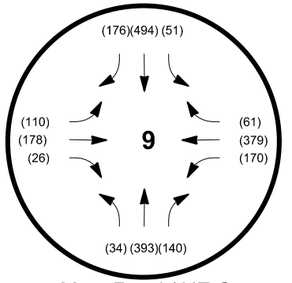
Rose Street / Offner Road



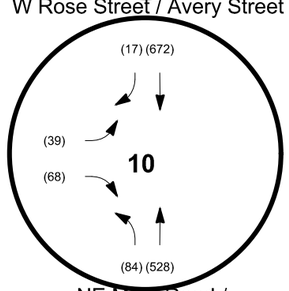
W Rose Street / Avery Street



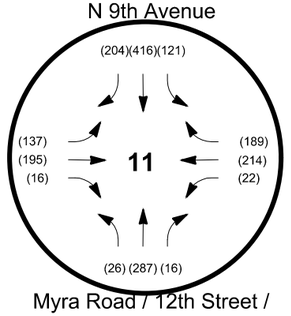
W Rose Street / N 9th Avenue



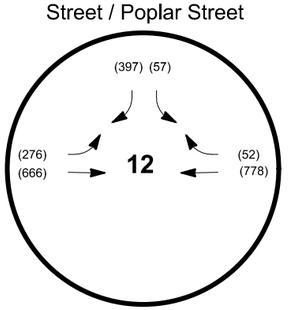
Myra Road / NE C Street / Poplar Street



NE Myra Road / E Whitman Drive



Myra Road / 12th Street / The Dallas Military Road

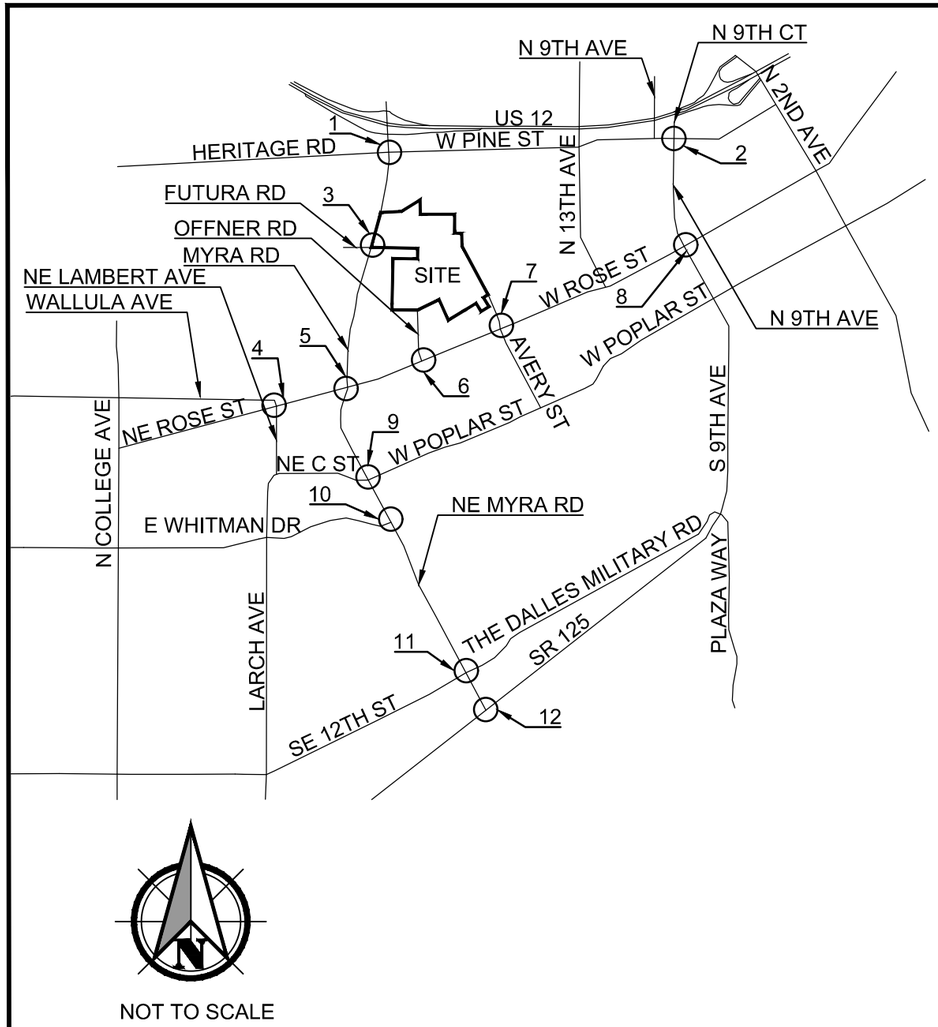


Myra Road / SR 125

FIGURE 11

2040 Without Project Volumes

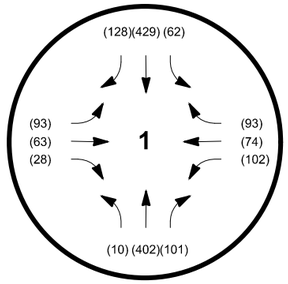
Konen Myra Road Development



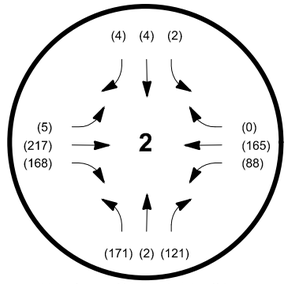
NOT TO SCALE

LEGEND

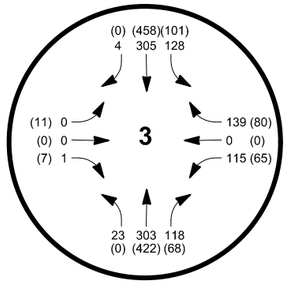
○	INTERSECTION
XXX	AM PEAK HOUR
(XXX)	PM PEAK HOUR



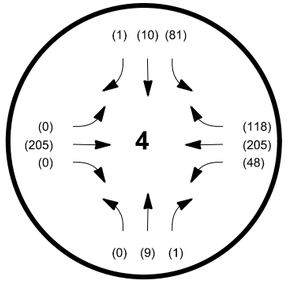
Myra Road / Heritage Road / Pine Street



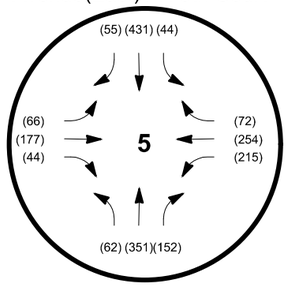
W Pine Street / N 9th Avenue(East) / N 9th Court



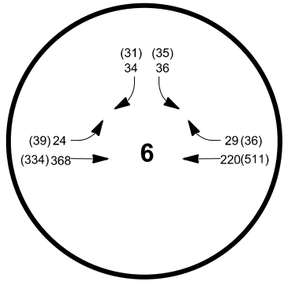
Myra Road / Futura Road



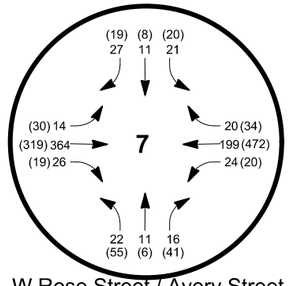
NE Rose Street / Wallula Avenue / NE Lambert Avenue



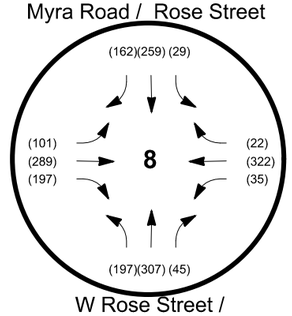
Myra Road / Rose Street



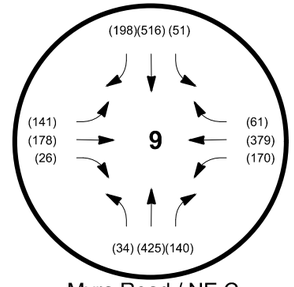
Rose Street / Offner Road



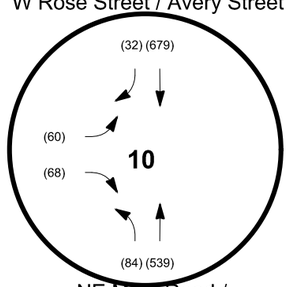
W Rose Street / Avery Street



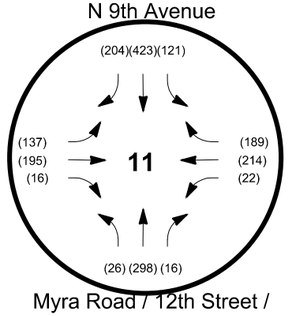
W Rose Street / N 9th Avenue



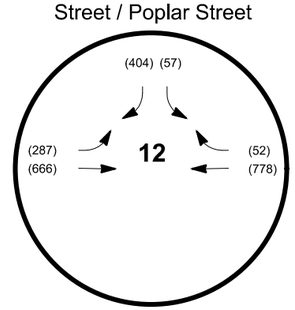
Myra Road / NE C Street / Poplar Street



NE Myra Road / E Whitman Drive



Myra Road / 12th Street / The Dallas Military Road



Myra Road / SR 125

FIGURE 12

2040 With Project Volumes

Konen Myra Road Development

Appendix A

Traffic Count Data and Calculations

File Name: E:\Survey\Projects\3606-00 La Quinta Inn\Traffic Counts\Roundabout_Heritage&Pine.ppd
Start Date: 1/21/2014
Start Time: 4:00:00 PM
Site Code: 00000014
Location: Myra Rd/Heritage Rd-Pine St
Peak Hour: 4:30 P.M. - 5:30 P.M.
Comment: Observed traffic from Southeast Corner of Roundabout

	From North				From East				From South				From West			
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
04:00 PM	24	57	10	0	33	20	32	0	9	35	0	0	1	5	6	0
04:15 PM	21	53	17	0	14	17	18	0	17	55	1	0	3	9	6	0
04:30 PM	31	54	11	0	19	11	12	0	12	46	2	0	3	5	13	0
04:45 PM	10	59	8	0	15	10	16	0	10	51	0	0	0	11	18	0
05:00 PM	19	82	16	1	15	22	14	0	19	60	1	0	10	20	19	0
05:15 PM	30	70	9	0	16	9	14	0	7	48	2	0	6	9	15	0
PM Peak	90	265	44	1	65	52	56	0	48	205	5	0	19	45	65	0
05:30 PM	16	39	6	0	8	15	7	0	14	31	2	0	2	8	7	0
05:45 PM	10	46	10	0	13	18	11	0	10	45	2	0	2	6	8	0

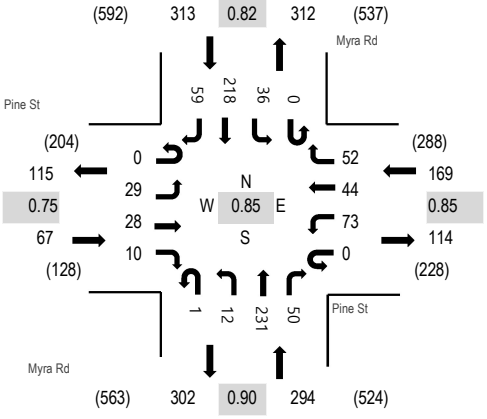
All Traffic Data Services Inc.

(303) 216-2439
www.alltrafficdata.net

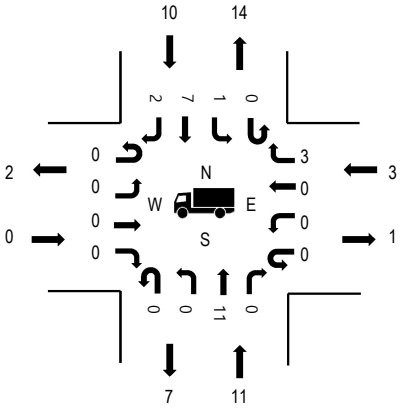
Location: Myra Rd & Pine St PM
Date: Tuesday, March 31, 2020
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

Peak Hour

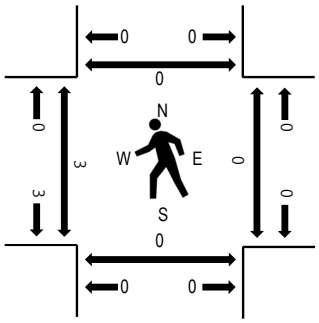
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.75
WB	1.8%	0.85
NB	3.7%	0.90
SB	3.2%	0.82
All	2.8%	0.85

Traffic Counts - Motorized Vehicles

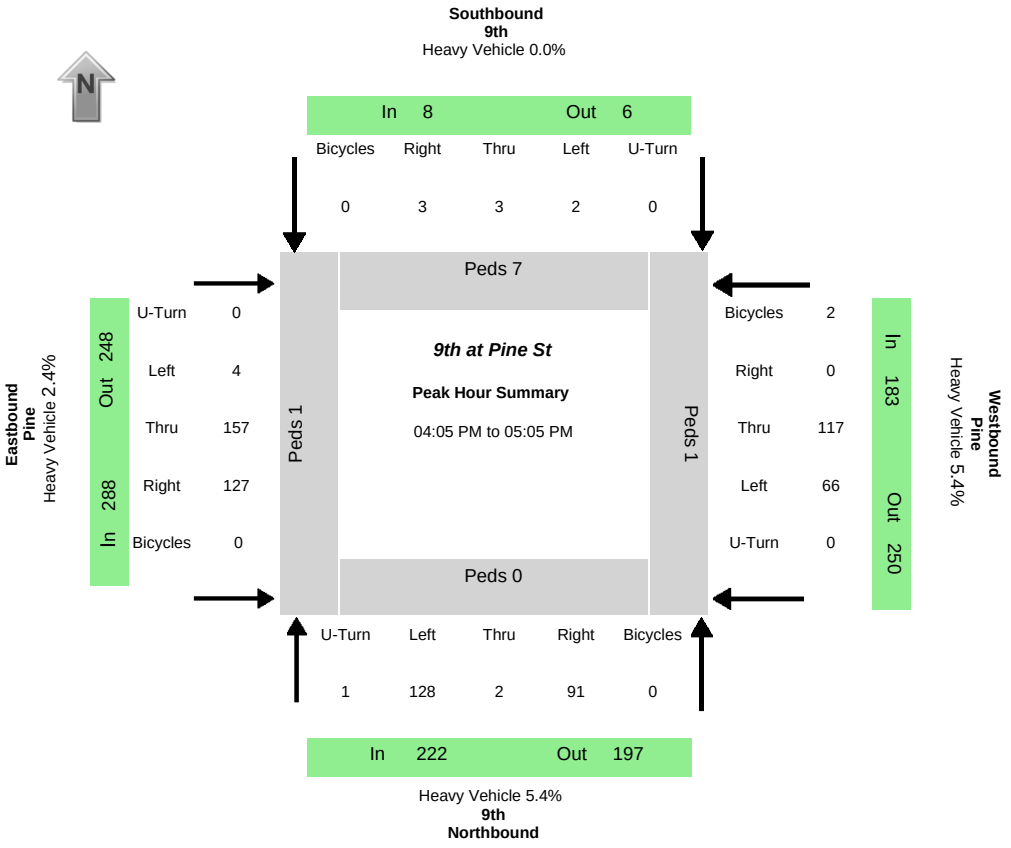
Interval Start Time	Pine St Eastbound				Pine St Westbound				Myra Rd Northbound				Myra Rd Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	0	1	2	0	9	2	3	0	2	14	4	0	2	19	4	62	826
4:05 PM	0	0	1	1	0	10	1	2	0	1	16	6	0	4	18	3	63	831
4:10 PM	0	6	4	0	0	3	4	1	0	2	20	4	0	6	19	1	70	841
4:15 PM	0	2	3	1	0	6	5	3	0	1	25	4	0	3	9	7	69	843
4:20 PM	0	2	0	0	0	9	2	5	0	0	18	2	0	1	23	3	65	832
4:25 PM	0	3	2	0	0	9	2	3	0	1	12	7	0	7	12	7	65	826
4:30 PM	0	7	4	0	0	11	4	4	0	1	19	7	0	4	25	8	94	809
4:35 PM	0	3	1	0	0	4	3	6	0	4	19	4	0	3	19	7	73	771
4:40 PM	0	4	4	1	0	5	5	8	0	0	20	3	0	6	22	2	80	762
4:45 PM	0	2	2	1	0	4	2	2	0	0	30	2	0	3	13	3	64	736
4:50 PM	0	1	5	0	0	5	4	2	0	1	14	3	0	1	18	3	57	722
4:55 PM	0	1	2	1	0	2	4	5	0	0	15	8	0	3	16	7	64	712
5:00 PM	0	2	3	2	0	8	3	3	0	1	16	2	0	4	18	5	67	706
5:05 PM	0	0	1	1	0	4	5	6	0	2	22	6	0	0	20	6	73	
5:10 PM	0	2	1	3	0	6	5	5	1	1	21	2	0	1	23	1	72	
5:15 PM	0	2	3	1	0	4	3	6	0	1	14	4	0	4	13	3	58	
5:20 PM	0	0	3	4	0	5	1	3	0	2	11	3	0	4	17	6	59	
5:25 PM	0	4	1	0	1	2	2	1	0	1	15	6	0	2	9	4	48	
5:30 PM	0	0	1	2	0	3	4	4	0	0	17	7	0	1	14	3	56	
5:35 PM	0	2	2	1	0	2	3	4	0	0	11	12	0	4	14	9	64	
5:40 PM	0	4	3	0	0	3	3	4	0	0	12	2	0	1	15	7	54	
5:45 PM	0	1	0	0	0	5	2	4	0	1	9	4	0	3	19	2	50	
5:50 PM	0	4	3	1	0	2	2	4	0	1	12	1	0	1	13	3	47	
5:55 PM	0	1	3	0	0	3	3	1	0	0	13	2	0	1	28	3	58	
Count Total	0	53	53	22	1	124	74	89	1	23	395	105	0	69	416	107	1,532	
Peak Hour	0	29	28	10	0	73	44	52	1	12	231	50	0	36	218	59	843	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	1	0	1	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	2	0	0	2	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	1	0	1	2	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	2	0	0	2	4:15 PM	0	0	0	0	0	4:15 PM	1	0	0	0	1
4:20 PM	0	1	0	0	1	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	1	0	0	1	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	1	1	3	5	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	1	1	0	2	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	0	0	2	2	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	0	0	1	1	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	2	0	1	3	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	2	1	0	3	5:00 PM	0	0	0	0	0	5:00 PM	2	0	0	0	2
5:05 PM	0	1	0	3	4	5:05 PM	0	0	1	0	1	5:05 PM	0	0	0	0	0
5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	2	0	2	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	1	0	1	2	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	0	0	1	1	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	1	0	0	1	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	1	0	0	1	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	1	1	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	1	1	0	0	2	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	2	2	4	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	1	18	8	16	43	Count Total	0	0	1	0	1	Count Total	3	0	0	0	3
Peak Hour	0	11	3	10	24	Peak Hour	0	0	1	0	1	Peak Hour	3	0	0	0	3

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*9th*
E/W street	*Pine*
City, State	Walla Walla WA
Site Notes	
Location	46.069056 - -118.349863
Start Date	Tuesday, November 01, 2016
Start Time	04:00:00 PM
Weather	
Study ID #	
Peak Hour Start	04:05:00 PM
Peak 15 Min Start	04:05:00 PM
PHF (15-Min Int)	0.91



Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
128	2	91	1	2	3	3	0	4	157	127	0	66	117	0	0	222	8	288	183	197	6	248	250

Percent Heavy Vehicles

6.3%	0.0%	4.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	3.9%	0.0%	3.0%	6.8%	0.0%	0.0%	5.4%	0.0%	2.4%	5.5%	3.6%	0.0%	6.5%	2.4%

PHV- Bicycles

Northbound				Southbound				Eastbound				Westbound				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	**Sum**
0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2

PHV - Pedestrians

in Crosswalk				
NB	SB	EB	WB	**Sum**
0	7	1	1	9

All Vehicle Volumes

	Northbound 9th				Southbound 9th				Eastbound Pine				Westbound Pine				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
04:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:05:00 PM	10	1	4	1	0	0	0	0	0	14	14	0	6	12	0	0		
04:10:00 PM	15	1	9	0	0	0	0	0	0	17	10	0	3	10	0	0	127	
04:15:00 PM	14	0	7	0	0	0	0	0	1	14	14	0	4	11	0	0	192	
04:20:00 PM	9	0	6	0	0	1	1	0	0	12	10	0	3	6	0	0	178	
04:25:00 PM	10	0	5	0	1	0	1	0	0	15	10	0	5	9	0	0	169	
04:30:00 PM	8	0	4	0	0	0	0	0	1	14	7	0	4	14	0	0	156	
04:35:00 PM	10	0	12	0	0	0	1	0	0	12	7	0	7	9	0	0	166	
04:40:00 PM	15	0	9	0	0	0	0	0	1	15	9	0	6	5	0	0	170	
04:45:00 PM	8	0	12	0	0	0	0	0	0	5	15	0	2	12	0	0	172	
04:50:00 PM	12	0	7	0	0	0	0	0	0	10	7	0	11	10	0	0	171	
04:55:00 PM	7	0	13	0	1	1	0	0	1	12	12	0	7	5	0	0	170	636
05:00:00 PM	10	0	3	0	0	1	0	0	0	17	12	0	8	14	0	0	181	701
05:05:00 PM	12	1	8	0	1	0	0	0	0	11	13	0	5	2	1	0	178	693
05:10:00 PM	14	0	13	0	0	0	1	0	0	13	10	0	6	10	1	0	187	696
05:15:00 PM	16	0	8	0	0	0	0	0	0	9	10	0	5	16	0	0	186	695
05:20:00 PM	10	1	8	0	0	0	0	0	0	11	10	0	5	8	0	0	185	700
05:25:00 PM	5	0	5	0	0	0	0	0	0	9	15	0	6	10	0	0	167	694
05:30:00 PM	11	0	9	0	0	1	0	0	0	7	13	0	5	7	0	0	156	695
05:35:00 PM	10	0	2	0	1	0	1	0	3	7	10	0	3	9	0	0	149	683
05:40:00 PM	17	1	8	0	1	0	0	0	0	7	11	0	4	8	0	0	156	680
05:45:00 PM	7	0	9	0	0	2	0	0	0	11	11	0	2	8	0	0	153	676
05:50:00 PM	15	1	8	0	1	2	0	0	0	5	7	0	4	11	0	0	161	673
05:55:00 PM	10	0	9	0	0	0	0	0	0	9	8	0	2	9	0	0	151	661

Intersection: Myra/Futura
Count Date: Thursday, April 9, 2020
Count Taken At: 7:00
Interval Length 15 mins
# of Intervals: 8

Southbound: Myra
Westbound: Futura
Northbound: Myra
Eastbound: Futura

Total	Peak Hour	SBR	SB	SBL	WBR	WB	WBL	NBR	NB	NBL	EBR	EB	EBL	Total	PHF
Veh:	7:00 to 8:00	2	191	0	0	0	0	0	206	13	1	0	0	413	0.84
	Heavy Veh %	0%	8%	--	--	--	--	--	4%	15%	0%	--	--	6%	

Autos:	Time	SBR	SB	SBL	WBR	WB	WBL	NBR	NB	NBL	EBR	EB	EBL	Total	Last Hour
1	7:00 to 7:15	0	46	0	0	0	0	0	46	1	1	0	0	94	--
2	7:15 to 7:30	0	30	0	0	0	0	0	43	3	0	0	0	76	--
3	7:30 to 7:45	0	47	0	0	0	0	0	45	3	0	0	0	95	--
4	7:45 to 8:00	2	52	0	0	0	0	0	64	4	0	0	0	123	388
5	8:00 to 8:15	0	37	0	0	0	0	0	40	0	0	0	0	77	371
6	8:15 to 8:30	1	38	0	0	0	0	0	36	0	0	0	0	75	370
7	8:30 to 8:45	0	42	0	0	0	0	0	36	0	1	0	0	79	354
8	8:45 to 9:00	0	38	0	0	0	0	1	42	0	0	0	2	83	314

Trucks:	Time	SBR	SB	SBL	WBR	WB	WBL	NBR	NB	NBL	EBR	EB	EBL	Total	Last Hour
1	7:00 to 7:15	0	6	0	0	0	0	0	4	0	0	0	0	10	--
2	7:15 to 7:30	0	5	0	0	0	0	0	1	0	0	0	0	6	--
3	7:30 to 7:45	0	5	0	0	0	0	0	3	1	0	0	0	9	--
4	7:45 to 8:00	0	0	0	0	0	0	0	0	1	0	0	0	1	26
5	8:00 to 8:15	1	1	0	0	0	0	0	2	0	0	0	0	4	20
6	8:15 to 8:30	0	3	0	0	0	0	0	4	0	0	0	0	7	21
7	8:30 to 8:45	0	1	0	0	0	0	0	4	0	0	0	0	5	17
8	8:45 to 9:00	0	4	0	0	0	0	0	5	0	0	0	0	9	25

Buses:	Time	SBR	SB	SBL	WBR	WB	WBL	NBR	NB	NBL	EBR	EB	EBL	Total	Last Hour
1	7:00 to 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	--
2	7:15 to 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	--
3	7:30 to 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	--
4	7:45 to 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	8:00 to 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	8:15 to 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	8:30 to 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	8:45 to 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Veh:	Time	SBR	SB	SBL	WBR	WB	WBL	NBR	NB	NBL	EBR	EB	EBL	Total	Last Hour
1	7:00 to 7:15	0	52	0	0	0	0	0	50	1	1	0	0	104	--
2	7:15 to 7:30	0	35	0	0	0	0	0	44	3	0	0	0	82	--
3	7:30 to 7:45	0	52	0	0	0	0	0	48	4	0	0	0	104	--
4	7:45 to 8:00	2	52	0	0	0	0	0	64	5	0	0	0	123	413
5	8:00 to 8:15	1	38	0	0	0	0	0	42	0	0	0	0	81	390
6	8:15 to 8:30	1	41	0	0	0	0	0	40	0	0	0	0	82	390
7	8:30 to 8:45	0	43	0	0	0	0	0	40	0	1	0	0	84	370
8	8:45 to 9:00	0	42	0	0	0	0	1	47	0	0	0	2	92	339

Intersection: Myra/Futura
Count Date: Thursday, April 9, 2020
Count Taken At: 16:00
Interval Length 15 mins
# of Intervals: 8

Southbound: Myra
Westbound: Futura
Northbound: Myra
Eastbound: Futura

Total	Peak Hour	SBR	SB	SBL	WBR	WB	WBL	NBR	NB	NBL	EBR	EB	EBL	Total	PHF
Veh:	16:30 to 17:30	0	356	0	0	0	0	0	297	0	5	0	7	665	0.92
		--	2%	--	--	--	--	--	3%	--	0%	--	0%	2%	

Autos:	Time	SBR	SB	SBL	WBR	WB	WBL	NBR	NB	NBL	EBR	EB	EBL	Total	Last Hour
1	16:00 to 16:15	0	81	0	0	0	0	0	74	0	0	0	0	155	--
2	16:15 to 16:30	0	72	0	0	0	0	0	63	0	0	0	0	135	--
3	16:30 to 16:45	0	78	0	0	0	0	0	73	0	4	0	5	160	--
4	16:45 to 17:00	0	102	0	0	0	0	0	68	0	0	0	1	171	621
5	17:00 to 17:15	0	102	0	0	0	0	0	73	0	1	0	1	177	643
6	17:15 to 17:30	0	66	0	0	0	0	0	75	0	0	0	0	141	649
7	17:30 to 17:45	1	65	0	0	0	0	0	68	1	0	0	0	135	624
8	17:45 to 18:00	0	52	0	0	0	0	0	41	0	0	0	1	94	547

Trucks:	Time	SBR	SB	SBL	WBR	WB	WBL	NBR	NB	NBL	EBR	EB	EBL	Total	Last Hour
1	16:00 to 16:15	0	4	0	0	0	0	0	1	0	0	0	0	5	--
2	16:15 to 16:30	0	2	0	0	0	0	0	2	0	0	0	0	4	--
3	16:30 to 16:45	0	1	0	0	0	0	0	3	0	0	0	0	4	--
4	16:45 to 17:00	0	0	0	0	0	0	0	1	0	0	0	0	1	14
5	17:00 to 17:15	0	2	0	0	0	0	0	2	0	0	0	0	4	13
6	17:15 to 17:30	0	5	0	0	0	0	0	2	0	0	0	0	7	16
7	17:30 to 17:45	0	1	0	0	0	0	0	0	0	0	0	0	1	13
8	17:45 to 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	12

Buses:	Time	SBR	SB	SBL	WBR	WB	WBL	NBR	NB	NBL	EBR	EB	EBL	Total	Last Hour
1	16:00 to 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	--
2	16:15 to 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	--
3	16:30 to 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	--
4	16:45 to 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	17:00 to 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	17:15 to 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	17:30 to 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	17:45 to 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Veh:	Time	SBR	SB	SBL	WBR	WB	WBL	NBR	NB	NBL	EBR	EB	EBL	Total	Last Hour
1	16:00 to 16:15	0	85	0	0	0	0	0	75	0	0	0	0	160	--
2	16:15 to 16:30	0	74	0	0	0	0	0	65	0	0	0	0	139	--
3	16:30 to 16:45	0	79	0	0	0	0	0	76	0	4	0	5	164	--
4	16:45 to 17:00	0	102	0	0	0	0	0	69	0	0	0	1	172	635
5	17:00 to 17:15	0	104	0	0	0	0	0	75	0	1	0	1	181	656
6	17:15 to 17:30	0	71	0	0	0	0	0	77	0	0	0	0	148	665
7	17:30 to 17:45	1	66	0	0	0	0	0	68	1	0	0	0	136	637
8	17:45 to 18:00	0	52	0	0	0	0	0	41	0	0	0	1	94	559

Intersection: Rose/Wallula
Count Date: Tuesday, March 31, 2020
Count Taken At: 16:08
Interval Length 15 mins
# of Intervals: 8

Southbound: Wallula
Westbound: Rose
Northbound: Lambert
Eastbound: Rose

Total	Peak Hour	SBR	SB	SBL	WBR	WB	WBL	NBR	NB	NBL	EBR	EB	EBL	Total	PHF
Veh:	16:38 to 17:38	1	6	34	65	112	28	1	5	0	0	90	0	342	0.92
	Heavy Veh %	0%	0%	6%	0%	1%	0%	0%	0%	--	--	1%	--	1%	

Autos:	Time	SBR	SB	SBL	WBR	WB	WBL	NBR	NB	NBL	EBR	EB	EBL	Total	Last Hour
1	16:08 to 16:23	0	3	9	11	24	3	3	0	0	0	21	0	74	--
2	16:23 to 16:38	0	1	7	8	32	5	0	0	0	0	26	0	79	--
3	16:38 to 16:53	0	0	13	20	32	3	0	2	0	0	22	0	92	--
4	16:53 to 17:08	0	3	3	14	20	6	1	1	0	0	26	0	74	319
5	17:08 to 17:23	0	1	9	15	36	10	0	1	0	0	16	0	88	333
6	17:23 to 17:38	1	2	7	16	23	9	0	1	0	0	25	0	84	338
7	17:38 to 17:53	0	2	6	8	21	4	1	0	0	0	20	0	62	308
8	17:53 to 18:08	1	4	7	13	30	5	0	2	0	0	13	0	75	309

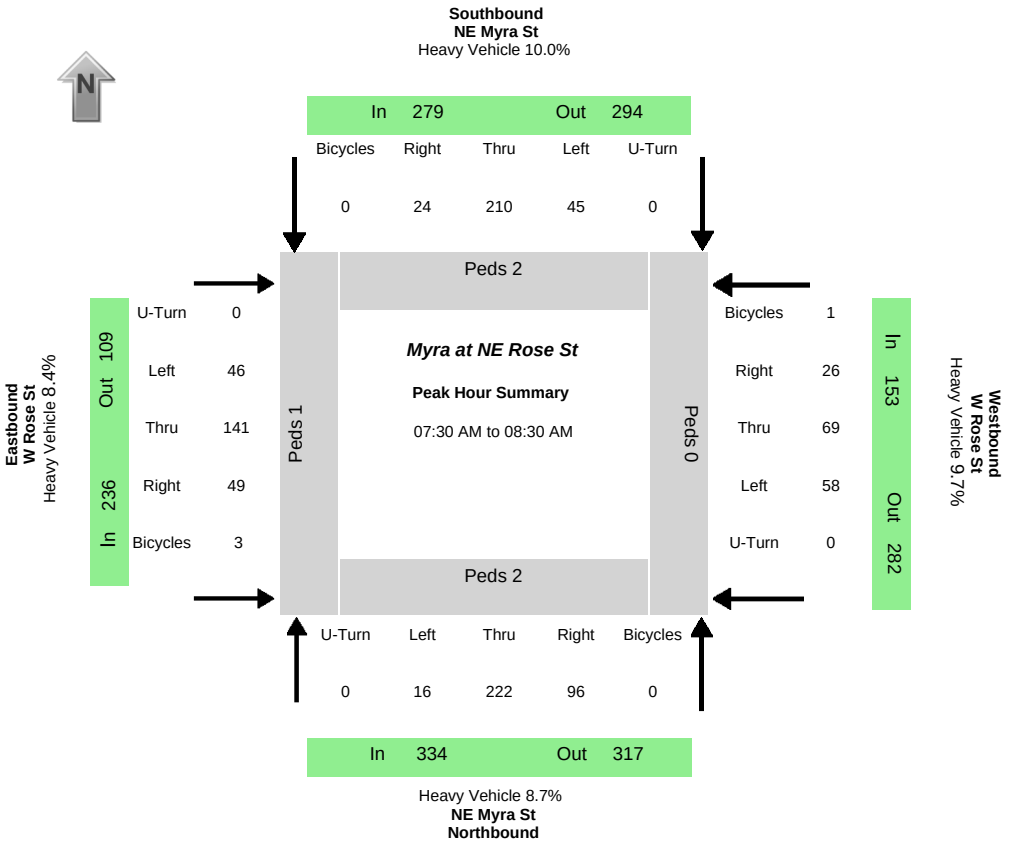
Trucks:	Time	SBR	SB	SBL	WBR	WB	WBL	NBR	NB	NBL	EBR	EB	EBL	Total	Last Hour
1	16:08 to 16:23	0	0	0	0	0	0	0	0	0	0	0	0	0	--
2	16:23 to 16:38	0	0	0	0	0	0	0	0	0	0	0	0	0	--
3	16:38 to 16:53	0	0	0	0	0	0	0	0	0	0	0	0	0	--
4	16:53 to 17:08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	17:08 to 17:23	0	0	1	0	0	0	0	0	0	0	0	0	1	1
6	17:23 to 17:38	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7	17:38 to 17:53	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8	17:53 to 18:08	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Buses:	Time	SBR	SB	SBL	WBR	WB	WBL	NBR	NB	NBL	EBR	EB	EBL	Total	Last Hour
1	16:08 to 16:23	0	0	0	0	0	0	0	0	0	0	0	0	0	--
2	16:23 to 16:38	0	0	0	0	0	0	0	0	0	0	1	0	1	--
3	16:38 to 16:53	0	0	1	0	0	0	0	0	0	0	0	0	1	--
4	16:53 to 17:08	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5	17:08 to 17:23	0	0	0	0	0	0	0	0	0	0	1	0	1	3
6	17:23 to 17:38	0	0	0	0	1	0	0	0	0	0	0	0	1	3
7	17:38 to 17:53	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8	17:53 to 18:08	0	0	0	0	0	0	0	0	0	0	1	0	1	3

Total Veh:	Time	SBR	SB	SBL	WBR	WB	WBL	NBR	NB	NBL	EBR	EB	EBL	Total	Last Hour
1	16:08 to 16:23	0	3	9	11	24	3	3	0	0	0	21	0	74	--
2	16:23 to 16:38	0	1	7	8	32	5	0	0	0	0	27	0	80	--
3	16:38 to 16:53	0	0	14	20	32	3	0	2	0	0	22	0	93	--
4	16:53 to 17:08	0	3	3	14	20	6	1	1	0	0	26	0	74	321
5	17:08 to 17:23	0	1	10	15	36	10	0	1	0	0	17	0	90	337
6	17:23 to 17:38	1	2	7	16	24	9	0	1	0	0	25	0	85	342
7	17:38 to 17:53	0	2	6	8	21	4	1	0	0	0	20	0	62	311
8	17:53 to 18:08	1	4	7	13	30	5	0	2	0	0	14	0	76	313

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NE Myra St*
E/W street	*W Rose St*
City, State	Walla Walla WA
Site Notes	
Location	46.057016 - -118.372825
Start Date	Tuesday, August 01, 2017
Start Time	07:00:00 AM
Weather	
Study ID #	
Peak Hour Start	07:30:00 AM
Peak 15 Min Start	07:40:00 AM
PHF (15-Min Int)	0.81



Peak-Hour Volumes (PHV)																								
Northbound				**Southbound**				**Eastbound**				**Westbound**				**Entering**				**Leaving**			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
16	222	96	0	45	210	24	0	46	141	49	0	58	69	26	0	334	279	236	153	317	294	109	282
Percent Heavy Vehicles																							
0.0%	9.5%	8.3%	0.0%	8.9%	10.0%	12.5%	0.0%	6.5%	9.2%	8.2%	0.0%	6.9%	13.0%	7.7%	0.0%	8.7%	10.0%	8.5%	9.8%	9.1%	8.8%	11.0%	8.9%

PHV- Bicycles																	PHV - Pedestrians				
Northbound				**Southbound**				**Eastbound**				**Westbound**					in Crosswalk				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	**Sum**	NB	SB	EB	WB	**Sum**
0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	4	2	2	1	0	5

All Vehicle Volumes

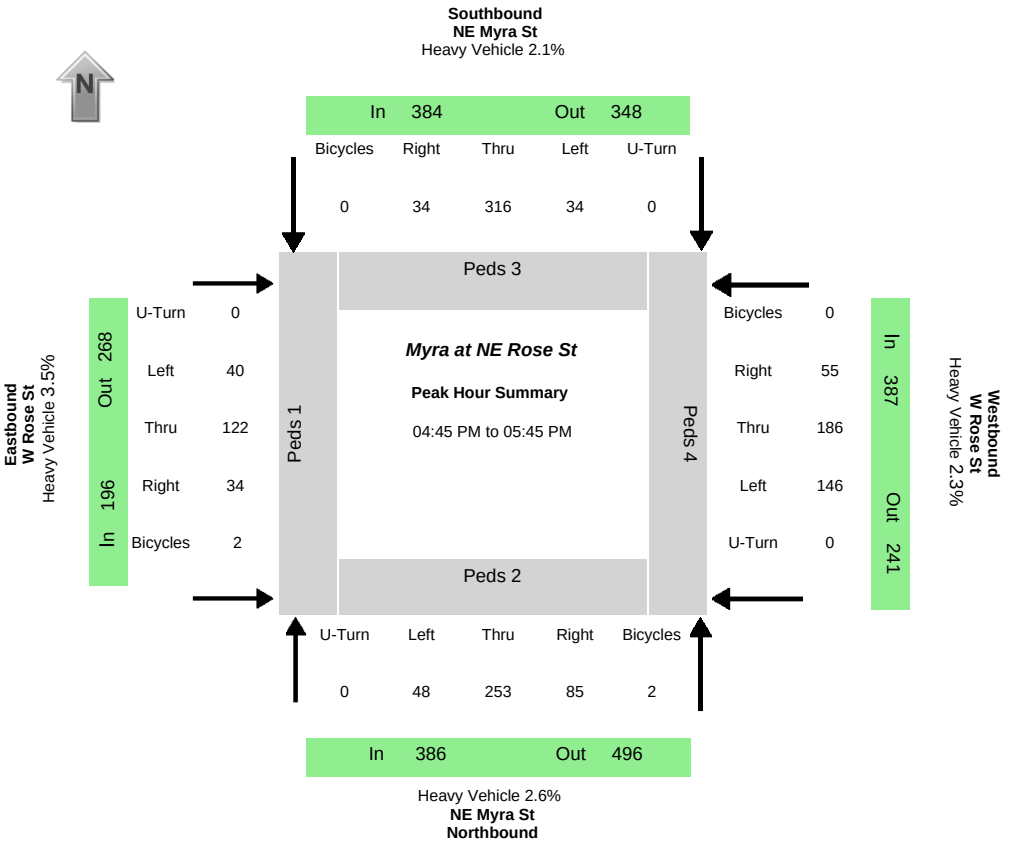
	Northbound NE Myra St				**Southbound** NE Myra St				**Eastbound** W Rose St				**Westbound** W Rose St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
07:00:00 AM	1	18	6	0	3	17	5	0	0	7	2	0	3	4	2	0		
07:05:00 AM	1	14	7	0	3	7	1	0	4	7	2	0	4	6	0	0		
07:10:00 AM	0	14	8	0	1	17	0	0	3	9	3	0	5	5	1	0	190	
07:15:00 AM	1	17	4	0	2	14	3	0	1	8	3	0	3	5	0	0	183	
07:20:00 AM	1	6	6	0	2	6	0	0	3	3	3	0	5	5	2	0	169	
07:25:00 AM	0	21	11	0	0	11	3	0	1	14	0	0	2	0	1	0	167	
07:30:00 AM	0	12	7	0	5	14	1	0	7	7	4	0	4	8	2	0	177	
07:35:00 AM	0	10	7	0	5	24	2	0	2	9	4	0	2	6	3	0	209	
07:40:00 AM	2	40	9	0	3	12	0	0	8	8	2	0	4	5	4	0	242	
07:45:00 AM	1	13	9	0	7	16	0	0	5	22	7	0	4	8	1	0	264	
07:50:00 AM	5	31	12	0	2	25	3	0	4	24	3	0	3	4	3	0	309	
07:55:00 AM	1	23	4	0	6	21	3	0	5	9	5	0	3	5	4	0	301	900
08:00:00 AM	1	15	8	0	3	20	0	0	1	15	3	0	5	5	2	0	286	910
08:05:00 AM	0	10	9	0	4	23	4	0	3	11	4	0	5	4	2	0	246	933
08:10:00 AM	1	18	13	0	3	20	2	0	3	8	4	0	7	5	1	0	242	952
08:15:00 AM	2	19	7	0	5	16	4	0	4	12	4	0	4	6	0	0	247	974
08:20:00 AM	1	17	4	0	2	10	2	0	2	10	4	0	6	9	2	0	237	1001
08:25:00 AM	2	14	7	0	0	9	3	0	2	6	5	0	11	4	2	0	217	1002
08:30:00 AM	0	11	8	0	1	10	1	0	2	13	1	0	5	4	2	0	192	989
08:35:00 AM	2	15	11	0	1	22	0	0	3	9	3	0	7	3	1	0	200	992
08:40:00 AM	1	18	5	0	4	15	1	0	3	13	2	0	5	7	1	0	210	970
08:45:00 AM	3	21	13	0	5	18	2	0	2	13	3	0	7	6	5	0	250	975
08:50:00 AM	1	15	10	0	6	12	2	0	4	8	2	0	7	6	2	0	248	931
08:55:00 AM	3	21	7	0	6	21	2	0	2	11	4	0	5	5	3	0	263	932

File Name: E:\Survey\Projects\3606-00 La Quinta Inn\Traffic Counts\Myra&Rose.ppd
Start Date: 1/15/2014
Start Time: 4:00:00 PM
Site Code: 00000011
Location: Myra Rd/ Rose St
Peak Hour: 4:30 P.M. - 5:30 P.M.
Comment: Observed Traffic from Southeast Corner of Intersection

	From North				From East				From South				From West			
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
04:00 PM	7	77	2	0	11	58	21	0	19	65	19	3	14	35	7	0
04:15 PM	7	71	5	0	12	40	29	0	23	42	11	0	10	37	8	0
04:30 PM	5	65	11	0	8	38	35	0	23	50	11	0	7	37	7	1
04:45 PM	15	73	4	0	10	39	23	0	17	46	8	0	12	26	4	0
05:00 PM	10	85	9	0	11	52	44	0	26	47	17	0	10	31	2	0
05:15 PM	4	64	5	0	6	41	32	2	26	77	6	1	10	34	7	0
PM Peak	34	287	29	0	35	170	134	2	92	220	42	1	39	128	20	1
05:30 PM	14	48	6	0	9	46	25	0	25	39	14	0	10	27	6	0
05:45 PM	7	51	6	0	5	28	17	0	20	48	14	1	5	31	5	0

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NE Myra St*
E/W street	*W Rose St*
City, State	Walla Walla WA
Site Notes	
Location	46.057016 - -118.372825
Start Date	Tuesday, August 01, 2017
Start Time	04:00:00 PM
Weather	
Study ID #	
Peak Hour Start	04:45:00 PM
Peak 15 Min Start	05:05:00 PM
PHF (15-Min Int)	0.94



Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
48	253	85	0	34	316	34	0	40	122	34	0	146	186	55	0	386	384	196	387	496	348	268	241

Percent Heavy Vehicles

0.0%	3.2%	2.4%	0.0%	11.8%	1.3%	0.0%	0.0%	5.0%	3.3%	2.9%	0.0%	2.1%	3.2%	0.0%	0.0%	2.6%	2.1%	3.6%	2.3%	1.6%	2.9%	2.2%	4.1%

PHV- Bicycles

Northbound				Southbound				Eastbound				Westbound				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum
0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	4

PHV - Pedestrians

in Crosswalk				
NB	SB	EB	WB	Sum
2	3	1	4	10

All Vehicle Volumes

	Northbound NE Myra St				Southbound NE Myra St				Eastbound W Rose St				Westbound W Rose St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
04:00:00 PM	1	18	5	0	4	31	4	0	6	10	3	0	14	11	1	0		
04:05:00 PM	2	31	6	0	7	30	2	0	5	11	2	0	17	17	6	0		
04:10:00 PM	3	20	11	0	4	30	1	0	2	6	4	0	8	13	10	0	356	
04:15:00 PM	3	13	15	0	5	30	1	0	4	9	2	0	8	25	3	0	366	
04:20:00 PM	2	16	6	0	5	32	3	0	3	7	3	0	17	15	13	0	352	
04:25:00 PM	2	24	10	0	1	24	1	0	1	8	2	0	14	11	4	0	342	
04:30:00 PM	5	15	13	0	1	17	1	0	5	10	5	0	6	9	6	0	317	
04:35:00 PM	0	19	8	0	2	28	0	0	5	8	4	0	8	16	4	0	297	
04:40:00 PM	2	17	6	0	4	24	3	0	2	9	3	0	8	17	1	0	291	
04:45:00 PM	6	26	11	0	4	17	2	0	6	15	3	0	12	18	2	0	320	
04:50:00 PM	3	20	8	0	1	23	3	0	3	8	6	0	8	19	7	0	327	
04:55:00 PM	7	29	3	0	0	24	1	0	5	7	3	0	7	12	4	0	333	1322
05:00:00 PM	4	21	9	0	4	24	3	0	2	10	2	0	6	14	9	0	319	1322
05:05:00 PM	3	15	3	0	3	29	5	0	4	14	2	0	15	25	0	0	328	1304
05:10:00 PM	6	17	6	0	8	25	1	0	1	10	0	0	15	21	7	0	343	1309
05:15:00 PM	1	30	8	0	2	27	3	0	8	10	2	0	18	13	3	0	360	1316
05:20:00 PM	2	23	3	0	1	34	2	0	2	11	4	0	13	7	8	0	352	1304
05:25:00 PM	2	21	9	0	3	30	3	0	4	7	5	0	11	10	1	0	341	1308
05:30:00 PM	3	17	8	0	5	26	4	0	3	14	3	0	12	16	1	0	328	1327
05:35:00 PM	5	13	7	0	2	29	4	0	0	5	3	0	16	20	8	0	330	1337
05:40:00 PM	6	21	10	0	1	28	3	0	2	11	1	0	13	11	5	0	336	1353
05:45:00 PM	3	20	7	0	1	27	1	0	1	7	3	0	13	13	3	0	323	1330
05:50:00 PM	1	27	9	0	2	12	1	0	4	14	1	0	10	11	3	0	306	1316
05:55:00 PM	4	19	10	0	3	26	2	0	2	7	0	0	10	20	1	0	298	1318

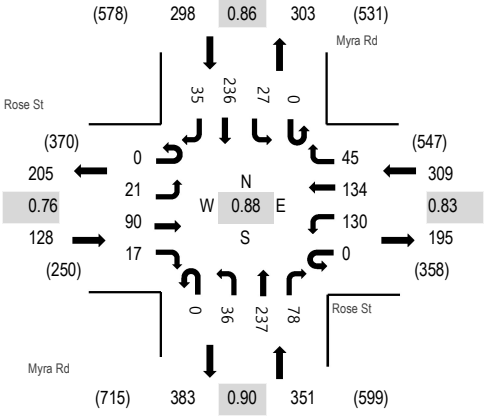
All Traffic Data Services Inc.

(303) 216-2439
www.alltrafficdata.net

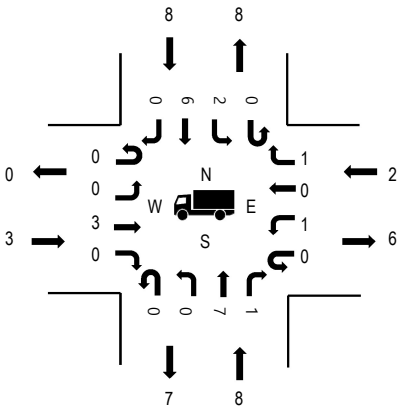
Location: Myra Rd & Rose St PM
Date: Tuesday, March 31, 2020
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

Peak Hour

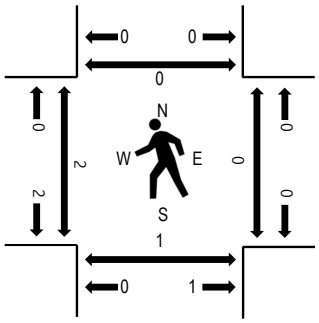
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	2.3%	0.76
WB	0.6%	0.83
NB	2.3%	0.90
SB	2.7%	0.86
All	1.9%	0.88

Traffic Counts - Motorized Vehicles

Interval Start Time	Rose St Eastbound				Rose St Westbound				Myra Rd Northbound				Myra Rd Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	1	7	1	0	8	13	1	0	4	20	5	0	1	27	3	91	1,036
4:05 PM	0	3	6	1	0	9	10	1	0	3	13	6	0	1	27	3	83	1,035
4:10 PM	0	4	4	1	0	2	9	1	0	0	20	6	0	3	22	1	73	1,047
4:15 PM	0	0	8	2	0	11	11	1	0	2	21	5	0	1	16	2	80	1,070
4:20 PM	0	3	7	1	0	10	11	3	0	2	15	5	0	2	23	5	87	1,074
4:25 PM	0	2	10	1	0	3	8	6	0	0	15	5	0	4	17	1	72	1,083
4:30 PM	0	3	8	0	0	13	10	2	0	3	20	7	0	2	21	6	95	1,086
4:35 PM	0	1	5	1	0	10	14	8	0	6	26	8	0	3	24	2	108	1,064
4:40 PM	0	3	11	2	0	11	8	9	0	3	19	6	0	5	25	3	105	1,024
4:45 PM	0	1	4	1	0	10	12	5	0	2	21	3	0	1	14	4	78	985
4:50 PM	0	2	16	4	0	9	5	5	0	1	16	6	0	1	18	4	87	972
4:55 PM	0	2	7	0	0	10	12	1	0	3	14	8	0	1	19	0	77	955
5:00 PM	0	2	3	2	0	9	9	3	0	2	26	6	0	2	24	2	90	938
5:05 PM	0	2	8	1	0	10	10	2	0	6	21	6	0	3	23	3	95	
5:10 PM	0	1	7	2	0	13	13	2	0	1	21	6	0	4	22	4	96	
5:15 PM	0	0	9	1	0	13	18	3	0	1	13	8	0	3	12	3	84	
5:20 PM	0	3	5	0	0	13	16	2	0	4	18	6	0	1	25	3	96	
5:25 PM	0	1	7	3	0	9	7	3	0	4	22	8	0	1	9	1	75	
5:30 PM	0	3	9	0	0	8	15	1	0	0	18	4	0	0	13	2	73	
5:35 PM	0	3	3	0	0	10	10	4	0	1	15	3	0	2	14	3	68	
5:40 PM	0	4	10	1	0	7	8	2	0	1	10	3	0	0	19	1	66	
5:45 PM	0	3	7	0	0	11	8	5	0	3	5	2	0	4	17	0	65	
5:50 PM	0	2	7	2	0	7	6	4	0	1	13	11	0	0	12	5	70	
5:55 PM	0	0	5	1	0	4	8	2	0	3	4	4	0	3	24	2	60	
Count Total	0	49	173	28	0	220	251	76	0	56	406	137	0	48	467	63	1,974	
Peak Hour	0	21	90	17	0	130	134	45	0	36	237	78	0	27	236	35	1,086	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	2	0	0	2	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	1	0	2	3	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	1	0	0	0	1	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	1	0	0	1	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	1	0	1	0	2	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	2	2
4:30 PM	0	1	0	0	1	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	1	0	1	2	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	0	1	2	3	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	2	0	1	3	4:45 PM	0	0	0	0	0	4:45 PM	1	0	0	0	1
4:50 PM	1	0	0	1	2	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0	4:55 PM	0	1	0	0	1
5:00 PM	0	2	1	0	3	5:00 PM	0	0	0	0	0	5:00 PM	1	0	0	0	1
5:05 PM	1	0	0	1	2	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	1	0	0	0	1	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	0	0	1	0	1	5:15 PM	0	0	0	0	0
5:20 PM	0	1	0	2	3	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	1	0	0	1	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	1	0	1	5:30 PM	0	0	0	0	0	5:30 PM	0	1	0	0	1
5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	1	1
5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	1	1	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	1	0	1	0	2	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	3	3	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	6	12	5	14	37	Count Total	0	0	1	0	1	Count Total	2	2	0	3	7
Peak Hour	3	8	2	8	21	Peak Hour	0	0	1	0	1	Peak Hour	2	1	0	0	3

Intersection: Rose/Offner
Count Date: Wednesday, April 8, 2020
Count Taken At: 16:00
Interval Length 15 mins
# of Intervals: 8

Southbound: Offner
Westbound: Rose
Northbound: N/A
Eastbound: Rose

Total Veh:	Peak Hour	SBR	SB	SBL	WBR	WB	WBL	NBR	NB	NBL	EBR	EB	EBL	Total	PHF
	16:30 to 17:30	1	0	7	6	120	0	0	0	0	0	186	4	324	0.75
	Heavy Veh %	0%	--	0%	0%	3%	--	--	--	--	--	2%	0%	2%	

Autos:	Time	SBR	SB	SBL	WBR	WB	WBL	NBR	NB	NBL	EBR	EB	EBL	Total	Last Hour
1	16:00 to 16:15	0	0	0	0	20	0	0	0	0	0	28	0	48	--
2	16:15 to 16:30	0	0	1	0	20	0	0	0	0	0	39	0	60	--
3	16:30 to 16:45	1	0	5	2	19	0	0	0	0	0	35	1	63	--
4	16:45 to 17:00	0	0	1	2	35	0	0	0	0	0	68	1	107	278
5	17:00 to 17:15	0	0	1	1	29	0	0	0	0	0	42	0	73	303
6	17:15 to 17:30	0	0	0	1	34	0	0	0	0	0	38	2	75	318
7	17:30 to 17:45	0	0	2	2	26	0	0	0	0	0	33	0	63	318
8	17:45 to 18:00	1	0	0	1	32	0	0	0	0	0	34	1	69	280

Trucks:	Time	SBR	SB	SBL	WBR	WB	WBL	NBR	NB	NBL	EBR	EB	EBL	Total	Last Hour
1	16:00 to 16:15	0	0	0	0	0	0	0	0	0	0	2	0	2	--
2	16:15 to 16:30	0	0	0	0	2	0	0	0	0	0	1	0	3	--
3	16:30 to 16:45	0	0	0	0	2	0	0	0	0	0	1	0	3	--
4	16:45 to 17:00	0	0	0	0	0	0	0	0	0	0	1	0	1	9
5	17:00 to 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	7
6	17:15 to 17:30	0	0	0	0	1	0	0	0	0	0	1	0	2	6
7	17:30 to 17:45	0	0	0	0	0	0	0	0	0	0	1	0	1	4
8	17:45 to 18:00	0	0	0	0	1	0	0	0	0	0	1	0	2	5

Buses:	Time	SBR	SB	SBL	WBR	WB	WBL	NBR	NB	NBL	EBR	EB	EBL	Total	Last Hour
1	16:00 to 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	--
2	16:15 to 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	--
3	16:30 to 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	--
4	16:45 to 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	17:00 to 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	17:15 to 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	17:30 to 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	17:45 to 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Veh:	Time	SBR	SB	SBL	WBR	WB	WBL	NBR	NB	NBL	EBR	EB	EBL	Total	Last Hour
1	16:00 to 16:15	0	0	0	0	20	0	0	0	0	0	30	0	50	--
2	16:15 to 16:30	0	0	1	0	22	0	0	0	0	0	40	0	63	--
3	16:30 to 16:45	1	0	5	2	21	0	0	0	0	0	36	1	66	--
4	16:45 to 17:00	0	0	1	2	35	0	0	0	0	0	69	1	108	287
5	17:00 to 17:15	0	0	1	1	29	0	0	0	0	0	42	0	73	310
6	17:15 to 17:30	0	0	0	1	35	0	0	0	0	0	39	2	77	324
7	17:30 to 17:45	0	0	2	2	26	0	0	0	0	0	34	0	64	322
8	17:45 to 18:00	1	0	0	1	33	0	0	0	0	0	35	1	71	285

PBS Engineering + Environmental
5 N Colville Street
Walla Walla , Washington, 99362
509.956.3026

Turn Count Summary

Location: Offner at Rose, Walla Walla, WA
GPS Coordinates: Lat=46.058270, Lon=-118.367292
Date: 2020-04-02
Day of week: Thursday
Weather: Sunny
Analyst: TAB

Total vehicle traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
16:00	2	0	1	0	88	1	0	0	0	1	53	0	146
16:15	0	0	1	0	56	4	0	0	0	3	52	0	116
16:30	2	0	2	0	83	2	0	0	0	1	67	0	157
16:45	3	0	1	0	73	0	0	0	0	0	53	0	130
17:00	3	0	1	0	94	4	0	0	0	2	51	0	155
17:15	4	0	1	0	61	3	0	0	0	1	48	0	118
17:30	1	0	0	0	58	5	0	0	0	0	46	0	110
17:45	3	0	1	0	51	7	0	0	0	1	44	0	107

Car traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
16:00	2	0	1	0	86	1	0	0	0	1	51	0	142
16:15	0	0	1	0	56	4	0	0	0	3	52	0	116
16:30	2	0	2	0	82	2	0	0	0	1	66	0	155
16:45	3	0	1	0	73	0	0	0	0	0	53	0	130
17:00	3	0	1	0	92	4	0	0	0	2	50	0	152
17:15	4	0	1	0	59	3	0	0	0	1	46	0	114
17:30	1	0	0	0	57	5	0	0	0	0	46	0	109
17:45	3	0	1	0	50	7	0	0	0	1	42	0	104

Truck traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
16:00	0	0	0	0	2	0	0	0	0	0	2	0	4
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	1	0	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	1	0	1
17:15	0	0	0	0	0	0	0	0	0	0	2	0	2
17:30	0	0	0	0	1	0	0	0	0	0	0	0	1
17:45	0	0	0	0	1	0	0	0	0	0	2	0	3

Bicycle traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	1	0	0	0	0	0	0	0	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	2	0	0	0	0	0	0	0	2
17:15	0	0	0	0	2	0	0	0	0	0	0	0	2
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrian volumes

Interval starts	NE			NW			SW			SE			Total
	Left	Right	Total	Left	Right	Total	Left	Right	Total	Left	Right	Total	
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	2	2	2	0	2	4
16:45	0	0	0	0	0	0	0	0	0	1	0	1	1
17:00	0	0	0	0	0	0	0	0	0	1	0	1	1
17:15	0	0	0	0	0	0	1	0	1	3	0	3	4
17:30	0	0	0	0	0	0	0	0	0	1	0	1	1
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Peak Hour

16:30 - 17:30

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	12	0	5	0	311	9	0	0	0	4	219	0	560
Factor	0.75	0.00	0.62	0.00	0.83	0.56	0.00	0.00	0.00	0.50	0.82	0.00	0.89
Approach Factor	0.85			0.82			0.00			0.82			

Peak Hour Vehicle Summary

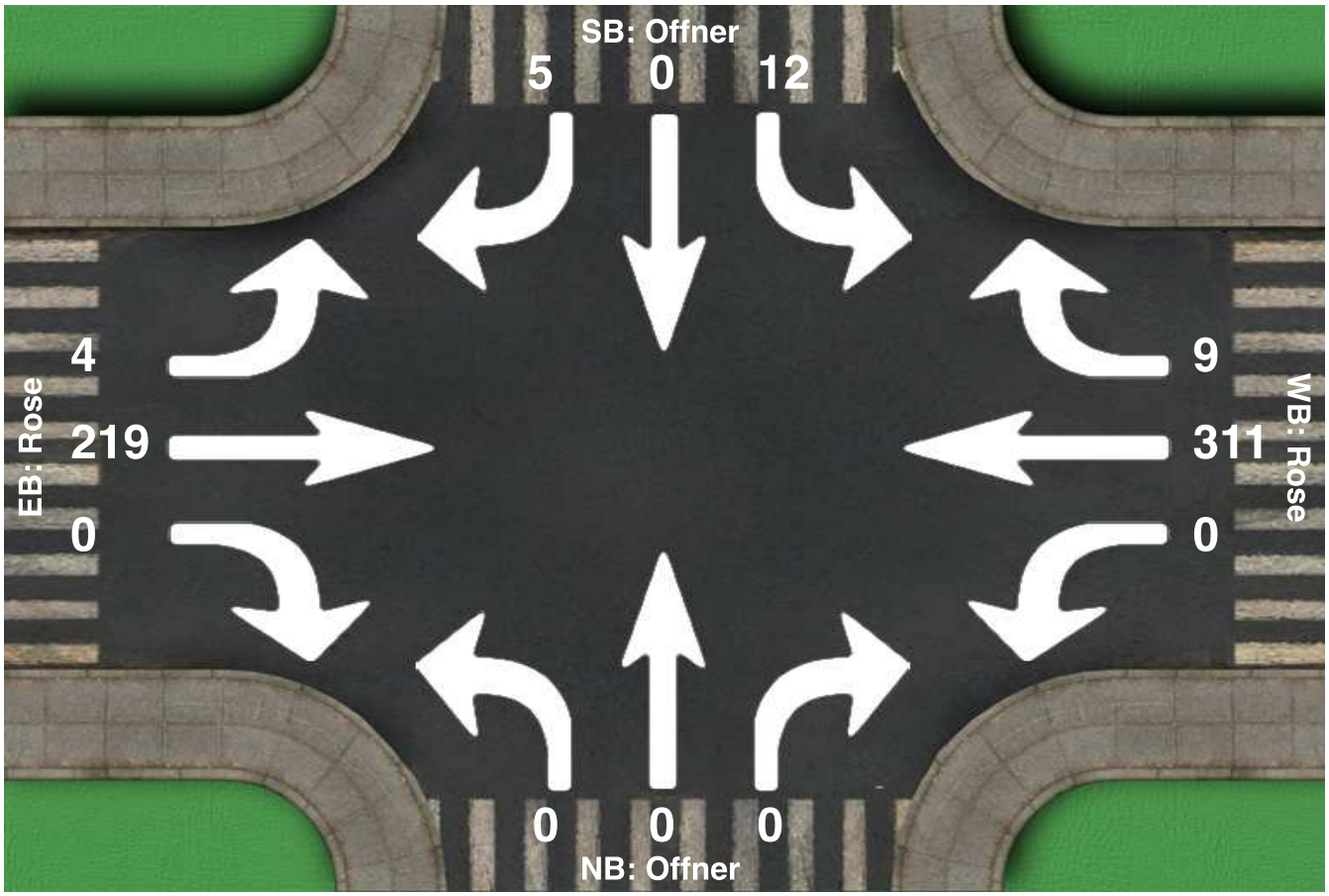
Vehicle	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Car	12	0	5	0	306	9	0	0	0	4	215	0	551
Truck	0	0	0	0	0	0	0	0	0	0	4	0	4
Bicycle	0	0	0	0	5	0	0	0	0	0	0	0	5

Peak Hour Pedestrians

	NE			NW			SW			SE			Total
	Left	Right	Total	Left	Right	Total	Left	Right	Total	Left	Right	Total	
Pedestrians	0	0	0	0	0	0	1	2	3	7	0	7	10

Intersection Peak Hour

Location: Offner at Rose, Walla Walla, WA
GPS Coordinates: Lat=46.058270, Lon=-118.367292
Date: 2020-04-02
Day of week: Thursday
Weather: Sunny
Analyst: TAB



Intersection Peak Hour

16:30 - 17:30

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	12	0	5	0	311	9	0	0	0	4	219	0	560
Factor	0.75	0.00	0.62	0.00	0.83	0.56	0.00	0.00	0.00	0.50	0.82	0.00	0.89
Approach Factor	0.85			0.82			0.00			0.82			

PBS Engineering + Environmental
5 N Colville Street
Walla Walla , Washington, 99362
509.956.3026

Turn Count Summary

Location: Avery at Rose, Walla Walla, WA
GPS Coordinates: Lat=46.056020, Lon=-118.359820
Date: 2020-04-09
Day of week: Thursday
Weather: Sunny
Analyst: TAB

Total vehicle traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:03	0	0	0	3	14	1	1	0	0	2	15	2	38
07:15	1	0	0	4	25	0	2	0	1	1	26	4	64
07:30	0	0	3	3	21	0	4	0	0	0	37	5	73
07:45	1	0	0	6	34	1	2	1	1	1	55	3	105
08:00	0	1	1	4	27	2	5	0	3	0	36	1	80
08:15	0	1	2	1	34	2	2	2	1	0	32	3	80
08:30	0	0	1	4	27	1	3	0	5	2	30	2	75
08:45	0	0	1	2	32	1	3	0	3	0	41	4	87
09:00	0	0	0	0	3	0	0	0	0	0	3	2	8

Car traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:03	0	0	0	3	14	1	1	0	0	2	15	2	38
07:15	1	0	0	4	23	0	2	0	1	1	26	4	62
07:30	0	0	2	2	21	0	4	0	0	0	35	4	68
07:45	1	0	0	6	33	1	2	1	1	1	55	3	104
08:00	0	0	1	4	27	1	5	0	2	0	35	1	76
08:15	0	1	2	1	33	2	2	1	1	0	31	3	77
08:30	0	0	1	4	24	1	3	0	5	2	30	2	72
08:45	0	0	1	2	31	1	3	0	3	0	41	4	86
09:00	0	0	0	0	3	0	0	0	0	0	3	2	8

Truck traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:03	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	2	0	0	0	0	0	0	0	2
07:30	0	0	1	1	0	0	0	0	0	0	1	0	3
07:45	0	0	0	0	1	0	0	0	0	0	0	0	1
08:00	0	0	0	0	0	0	0	0	1	0	1	0	2
08:15	0	0	0	0	1	0	0	0	0	0	1	0	2
08:30	0	0	0	0	3	0	0	0	0	0	0	0	3
08:45	0	0	0	0	1	0	0	0	0	0	0	0	1
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycle traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:03	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	1	1	2
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	1	0	0	0	1	0	0	0	0	0	0	2
08:15	0	0	0	0	0	0	0	1	0	0	0	0	1
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrian volumes

Interval starts	NE			NW			SW			SE			Total
	Left	Right	Total	Left	Right	Total	Left	Right	Total	Left	Right	Total	
07:03	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	1	1	0	0	0	0	1	1	0	0	0	2
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	1	0	1	0	0	0	1	0	1	2
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Peak Hour

07:45 - 08:45

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	1	2	4	15	122	6	12	3	10	3	153	9	340
Factor	0.25	0.50	0.50	0.62	0.90	0.75	0.60	0.38	0.50	0.38	0.70	0.75	0.81
Approach Factor	0.58			0.87			0.78			0.70			

Peak Hour Vehicle Summary

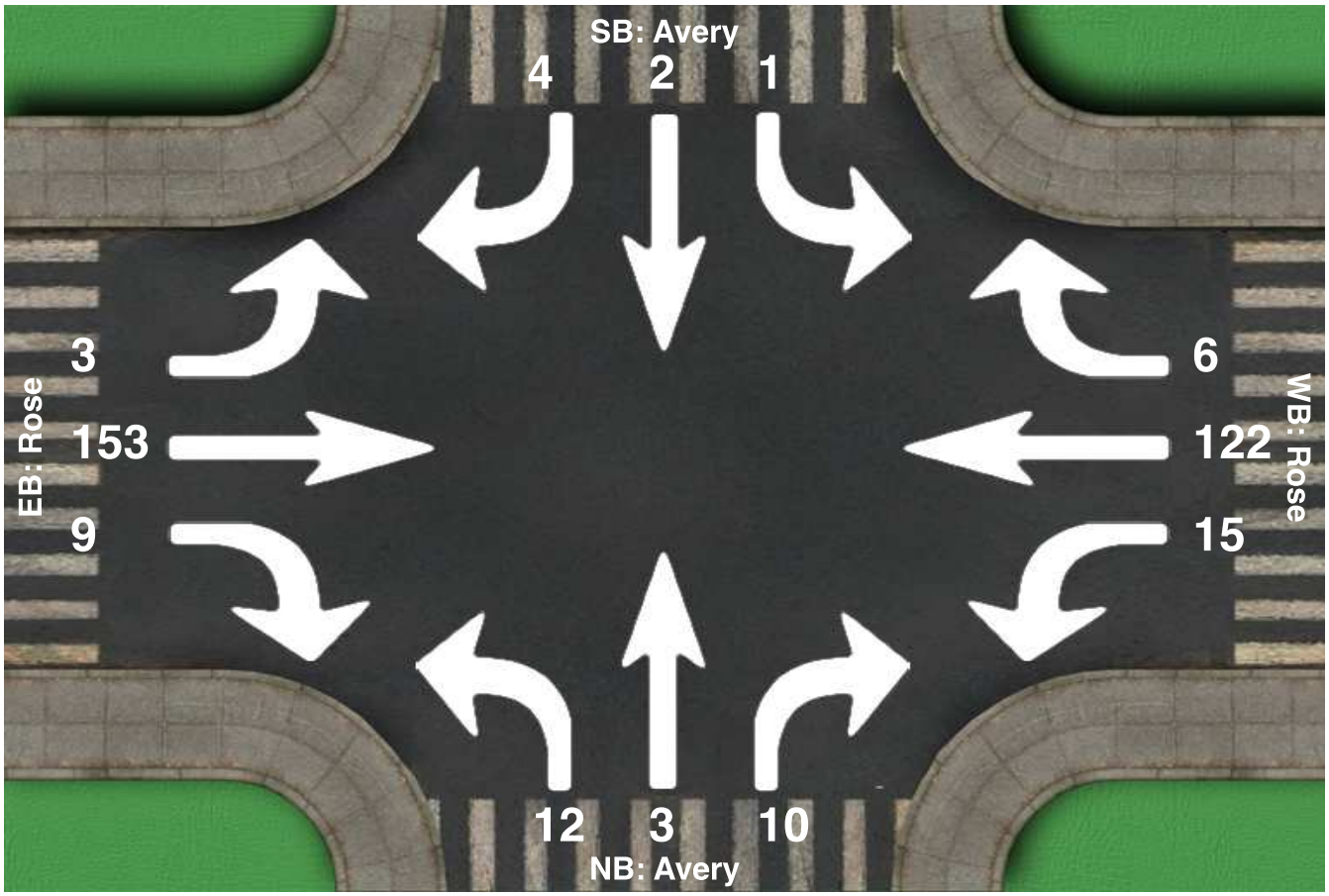
Vehicle	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Car	1	1	4	15	117	5	12	2	9	3	151	9	329
Truck	0	0	0	0	5	0	0	0	1	0	2	0	8
Bicycle	0	1	0	0	0	1	0	1	0	0	0	0	3

Peak Hour Pedestrians

	NE			NW			SW			SE			Total
	Left	Right	Total	Left	Right	Total	Left	Right	Total	Left	Right	Total	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Peak Hour

Location: Avery at Rose, Walla Walla, WA
GPS Coordinates: Lat=46.056020, Lon=-118.359820
Date: 2020-04-09
Day of week: Thursday
Weather: Sunny
Analyst: TAB



Intersection Peak Hour

07:45 - 08:45

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	1	2	4	15	122	6	12	3	10	3	153	9	340
Factor	0.25	0.50	0.50	0.62	0.90	0.75	0.60	0.38	0.50	0.38	0.70	0.75	0.81
Approach Factor	0.58			0.87			0.78			0.70			

PBS Engineering + Environmental
5 N Colville Street
Walla Walla , Washington, 99362
509.956.3026

Turn Count Summary

Location: Avery at Rose, Walla Walla, WA
GPS Coordinates: Lat=46.059822, Lon=-118.362223
Date: 2020-04-01
Day of week: Wednesday
Weather: Cloudy
Analyst: TAB

Total vehicle traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
16:05	1	2	1	3	38	1	7	0	3	0	27	1	84
16:15	0	0	0	5	64	0	7	0	4	0	41	2	123
16:30	1	0	0	2	67	1	11	0	10	0	38	3	133
16:45	1	0	1	1	66	3	6	0	8	2	45	4	137
17:00	1	1	2	1	86	3	8	0	5	0	56	1	164
17:15	1	1	0	8	70	0	7	0	3	2	47	1	140
17:30	1	1	2	0	66	1	5	0	1	2	42	3	124
17:45	0	0	0	2	50	0	4	1	1	0	38	2	98
18:00	0	0	0	0	20	0	1	1	0	0	19	1	42

Car traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
16:05	1	2	1	3	38	1	7	0	3	0	26	1	83
16:15	0	0	0	5	64	0	7	0	4	0	41	1	122
16:30	1	0	0	2	66	1	11	0	10	0	38	3	132
16:45	1	0	1	1	65	3	6	0	8	1	45	4	135
17:00	1	1	2	1	86	3	8	0	5	0	55	0	162
17:15	1	1	0	7	69	0	7	0	3	2	47	1	138
17:30	1	1	2	0	64	1	5	0	1	2	42	3	122
17:45	0	0	0	2	50	0	4	1	1	0	38	2	98
18:00	0	0	0	0	20	0	1	1	0	0	19	0	41

Truck traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
16:05	0	0	0	0	0	0	0	0	0	0	1	0	1
16:15	0	0	0	0	0	0	0	0	0	0	0	1	1
16:30	0	0	0	0	1	0	0	0	0	0	0	0	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	1	1
17:15	0	0	0	1	0	0	0	0	0	0	0	0	1
17:30	0	0	0	0	1	0	0	0	0	0	0	0	1
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	1	1

Bicycle traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
16:05	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	1	0	0	0	0	1	0	0	2
17:00	0	0	0	0	0	0	0	0	0	0	1	0	1
17:15	0	0	0	0	1	0	0	0	0	0	0	0	1
17:30	0	0	0	0	1	0	0	0	0	0	0	0	1
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrian volumes

Interval starts	NE			NW			SW			SE			Total
	Left	Right	Total	Left	Right	Total	Left	Right	Total	Left	Right	Total	
16:05	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	1	0	1	1
16:45	0	1	1	5	1	6	1	2	3	1	0	1	11
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	2	2	4	0	0	0	0	1	1	0	0	0	5
17:30	0	0	0	0	0	0	2	0	2	0	0	0	2
17:45	0	1	1	0	0	0	0	0	0	0	0	0	1
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Peak Hour

16:30 - 17:30

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	4	2	3	12	289	7	32	0	26	4	186	9	574
Factor	1.00	0.50	0.38	0.38	0.84	0.58	0.73	0.00	0.65	0.50	0.83	0.56	0.88
Approach Factor	0.56			0.86			0.69			0.87			

Peak Hour Vehicle Summary

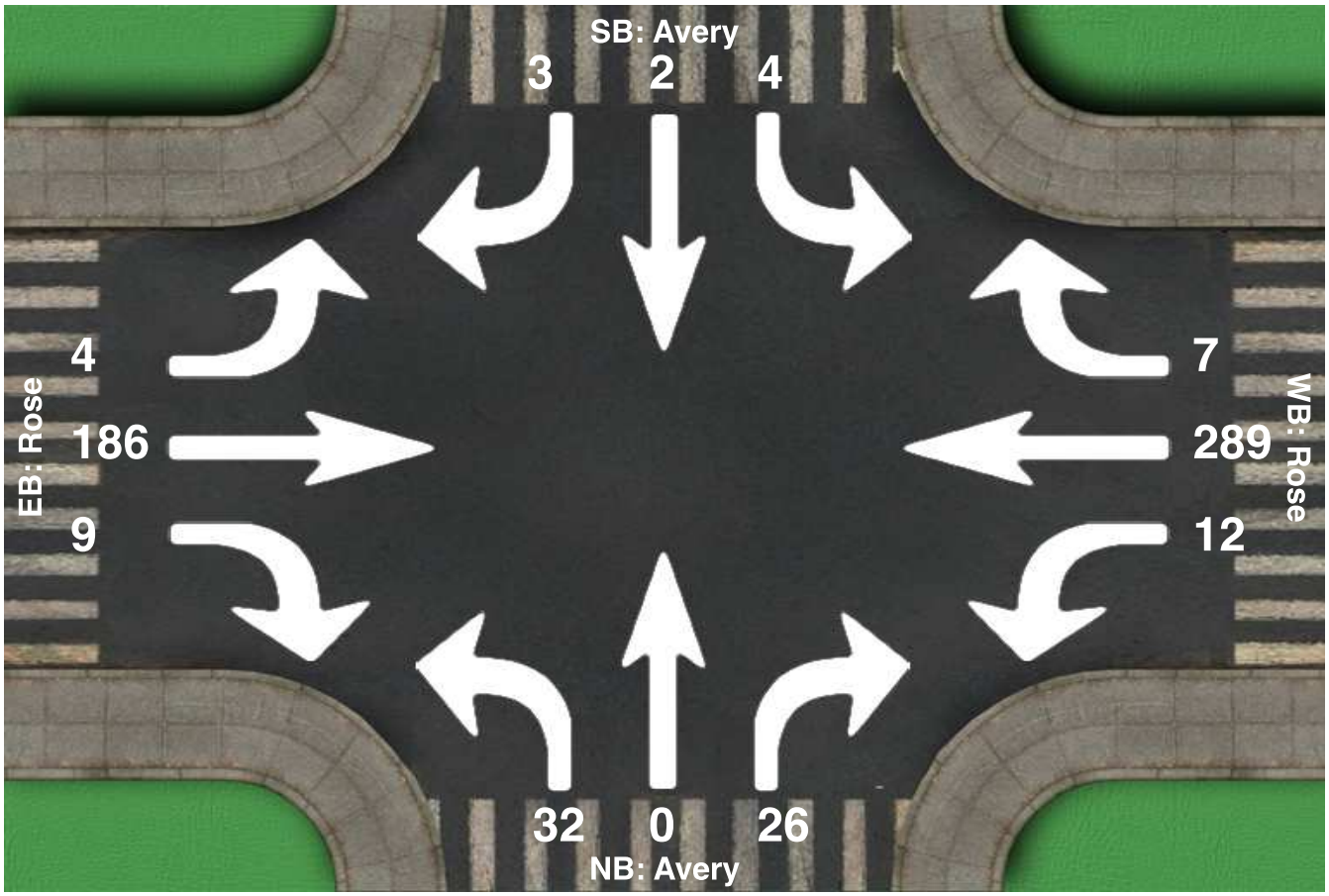
Vehicle	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Car	4	2	3	11	286	7	32	0	26	3	185	8	567
Truck	0	0	0	1	1	0	0	0	0	0	0	1	3
Bicycle	0	0	0	0	2	0	0	0	0	1	1	0	4

Peak Hour Pedestrians

	NE			NW			SW			SE			Total
	Left	Right	Total	Left	Right	Total	Left	Right	Total	Left	Right	Total	
Pedestrians	2	3	5	5	1	6	1	3	4	2	0	2	17

Intersection Peak Hour

Location: Avery at Rose, Walla Walla, WA
GPS Coordinates: Lat=46.059822, Lon=-118.362223
Date: 2020-04-01
Day of week: Wednesday
Weather: Cloudy
Analyst: TAB



Intersection Peak Hour

16:30 - 17:30

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	4	2	3	12	289	7	32	0	26	4	186	9	574
Factor	1.00	0.50	0.38	0.38	0.84	0.58	0.73	0.00	0.65	0.50	0.83	0.56	0.88
Approach Factor	0.56			0.86			0.69			0.87			

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
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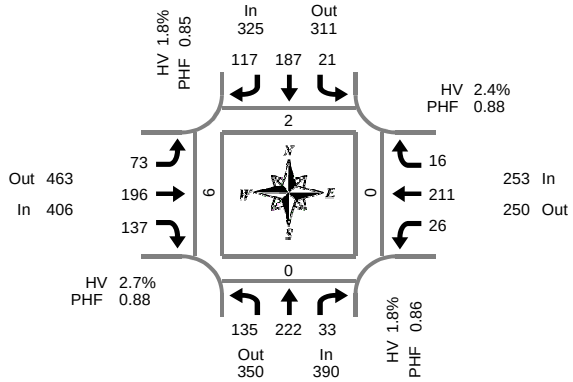


Peak Hour Summary
4:30 PM to 5:30 PM

9th St & W Rose St

Thursday, February 26, 2015
4:00 PM to 6:00 PM

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound 9th St				Southbound 9th St				Eastbound W Rose St				Westbound W Rose St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	36	46	8	0	9	75	40	1	16	53	28	1	9	49	7	0	376	0	1	0	0
4:15 PM	31	43	3	0	6	35	28	0	16	59	36	0	5	46	9	0	317	0	0	0	1
4:30 PM	35	49	10	0	5	57	34	0	19	41	33	0	8	43	5	0	339	1	0	0	2
4:45 PM	31	42	8	1	5	27	26	0	24	42	33	0	7	48	2	0	295	0	0	0	0
5:00 PM	34	69	10	0	7	50	39	0	9	68	39	0	4	61	3	0	393	1	0	0	1
5:15 PM	35	62	5	0	4	53	18	0	21	45	32	0	7	59	6	0	347	0	0	0	3
5:30 PM	33	39	7	0	2	43	30	0	16	34	27	0	3	42	4	1	280	0	0	0	0
5:45 PM	25	48	5	0	5	38	21	0	11	51	30	0	4	45	3	0	286	2	0	0	0
Total Survey	260	398	56	1	43	378	236	1	132	393	258	1	47	393	39	1	2,633	4	1	0	7

Peak Hour Summary
4:30 PM to 5:30 PM

By Approach	Northbound 9th St				Southbound 9th St				Eastbound W Rose St				Westbound W Rose St				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	390	350	740	1	325	311	636	0	406	463	869	0	253	250	503	0	1,374	2	0	0	6
%HV	1.8%				1.8%				2.7%				2.4%				2.2%				
PHF	0.86				0.85				0.88				0.88				0.87				

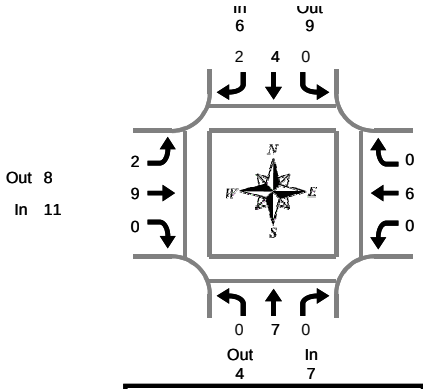
By Movement	Northbound 9th St				Southbound 9th St				Eastbound W Rose St				Westbound W Rose St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	135	222	33	390	21	187	117	325	73	196	137	406	26	211	16	253	1,374
%HV	0.0%	3.2%	0.0%	1.8%	0.0%	2.1%	1.7%	1.8%	2.7%	4.6%	0.0%	2.7%	0.0%	2.8%	0.0%	2.4%	2.2%
PHF	0.96	0.80	0.83	0.86	0.75	0.82	0.75	0.85	0.76	0.72	0.88	0.88	0.81	0.86	0.67	0.88	0.87

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound 9th St				Southbound 9th St				Eastbound W Rose St				Westbound W Rose St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	133	180	29	1	25	194	128	1	75	195	130	1	29	186	23	0	1,327	1	1	0	3
4:15 PM	131	203	31	1	23	169	127	0	68	210	141	0	24	198	19	0	1,344	2	0	0	4
4:30 PM	135	222	33	1	21	187	117	0	73	196	137	0	26	211	16	0	1,374	2	0	0	6
4:45 PM	133	212	30	1	18	173	113	0	70	189	131	0	21	210	15	1	1,315	1	0	0	4
5:00 PM	127	218	27	0	18	184	108	0	57	198	128	0	18	207	16	1	1,306	3	0	0	4

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



Peak Hour Summary
4:30 PM to 5:30 PM

9th St & W Rose St

Thursday, February 26, 2015
4:00 PM to 6:00 PM

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound 9th St				Southbound 9th St				Eastbound W Rose St				Westbound W Rose St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	1	0	0	1	0	2	1	3	0	1	0	1	0	0	0	0	5
4:15 PM	0	0	0	0	0	0	0	0	1	1	1	3	1	3	0	4	7
4:30 PM	0	4	0	4	0	2	1	3	0	2	0	2	0	2	0	2	11
4:45 PM	0	0	0	0	0	0	1	1	1	1	0	2	0	3	0	3	6
5:00 PM	0	0	0	0	0	0	0	0	0	4	0	4	0	1	0	1	5
5:15 PM	0	3	0	3	0	2	0	2	1	2	0	3	0	0	0	0	8
5:30 PM	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	4
5:45 PM	0	4	0	4	0	0	1	1	0	0	1	1	0	0	0	0	6
Total Survey	1	12	0	13	0	7	4	11	3	12	2	17	1	10	0	11	52

Heavy Vehicle Peak Hour Summary
4:30 PM to 5:30 PM

By Approach	Northbound 9th St			Southbound 9th St			Eastbound W Rose St			Westbound W Rose St			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	7	4	11	6	9	15	11	8	19	6	9	15	30
PHF	0.22			0.25			0.31			0.17			0.31

By Movement	Northbound 9th St				Southbound 9th St				Eastbound W Rose St				Westbound W Rose St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	7	0	7	0	4	2	6	2	9	0	11	0	6	0	6	30
PHF	0.00	0.22	0.00	0.22	0.00	0.25	0.25	0.25	0.25	0.32	0.00	0.31	0.00	0.19	0.00	0.17	0.31

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

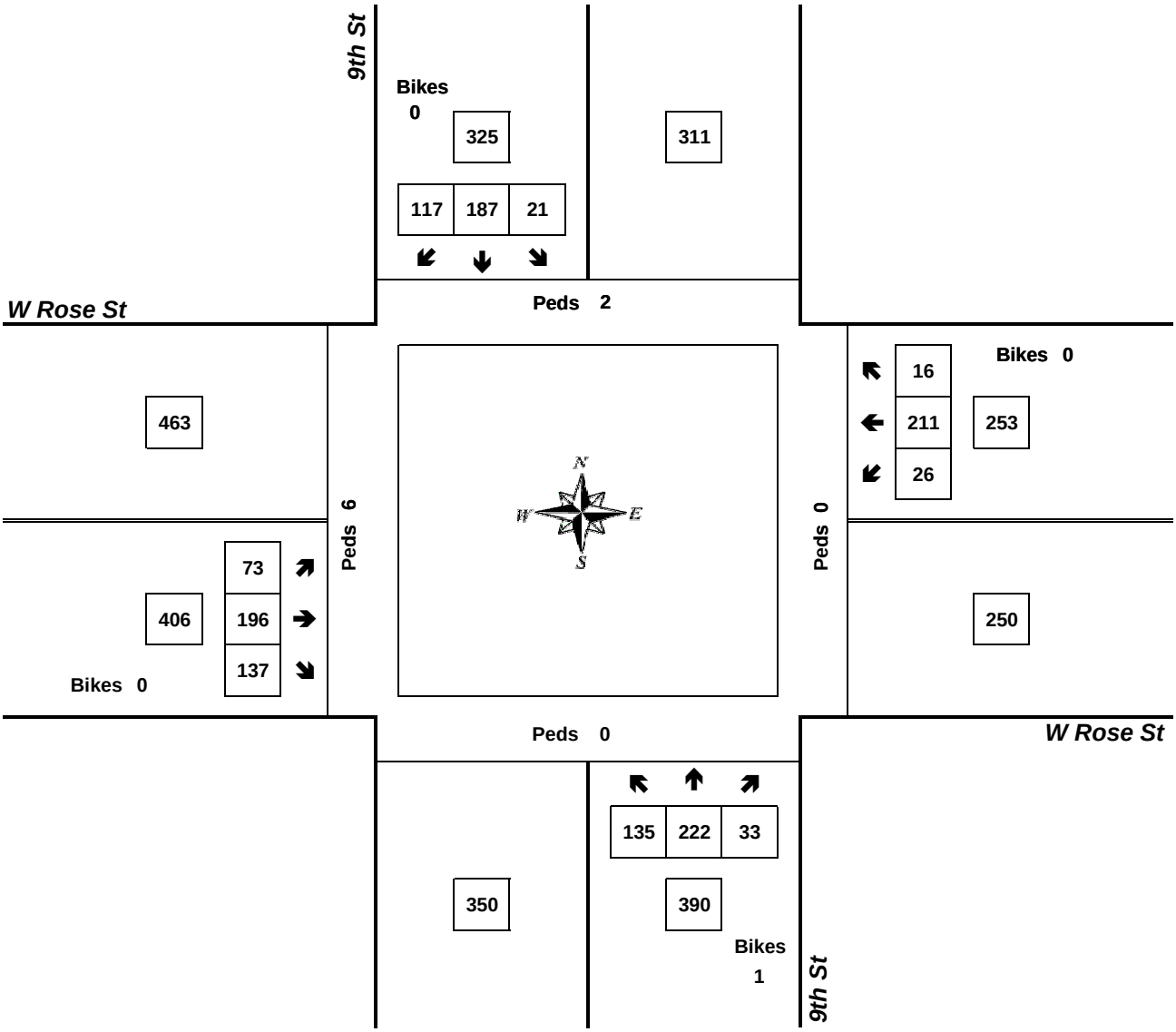
Interval Start Time	Northbound 9th St				Southbound 9th St				Eastbound W Rose St				Westbound W Rose St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	1	4	0	5	0	4	3	7	2	5	1	8	1	8	0	9	29
4:15 PM	0	4	0	4	0	2	2	4	2	8	1	11	1	9	0	10	29
4:30 PM	0	7	0	7	0	4	2	6	2	9	0	11	0	6	0	6	30
4:45 PM	0	4	0	4	0	3	1	4	2	8	0	10	0	5	0	5	23
5:00 PM	0	8	0	8	0	3	1	4	1	7	1	9	0	2	0	2	23

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

9th St & W Rose St

4:30 PM to 5:30 PM
Thursday, February 26, 2015



Approach	PHF	HV%	Volume
EB	0.88	2.7%	406
WB	0.88	2.4%	253
NB	0.86	1.8%	390
SB	0.85	1.8%	325
Intersection	0.87	2.2%	1,374

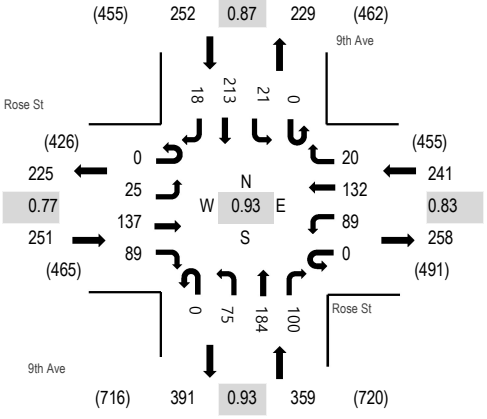
Count Period: 4:00 PM to 6:00 PM

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

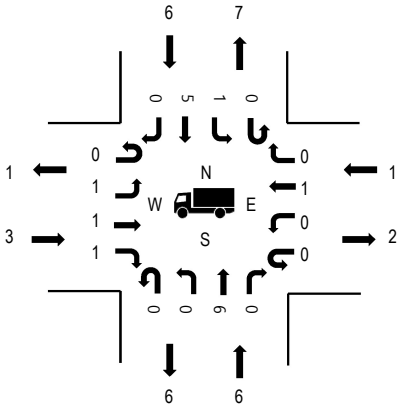
Location: 9th Ave & Rose St PM
Date: Tuesday, March 31, 2020
Peak Hour: 04:20 PM - 05:20 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

Peak Hour

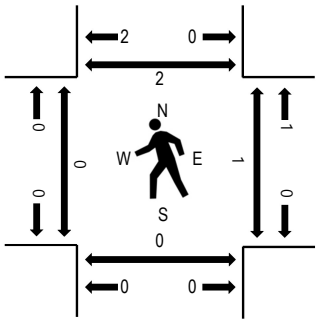
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	1.2%	0.77
WB	0.4%	0.83
NB	1.7%	0.93
SB	2.4%	0.87
All	1.5%	0.93

Traffic Counts - Motorized Vehicles

Interval Start Time	Rose St Eastbound				Rose St Westbound				9th Ave Northbound				9th Ave Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	3	11	8	0	8	11	3	0	4	15	10	0	2	18	1	94	1,092
4:05 PM	0	0	5	12	0	9	15	3	0	5	13	13	0	2	12	3	92	1,084
4:10 PM	0	1	10	5	0	6	10	1	0	8	16	6	0	1	11	0	75	1,089
4:15 PM	0	0	4	5	0	3	7	2	0	8	23	10	0	3	22	2	89	1,092
4:20 PM	0	2	10	10	0	7	12	2	0	7	15	8	0	1	22	1	97	1,103
4:25 PM	0	1	11	6	0	7	14	1	0	10	12	8	0	0	14	1	85	1,097
4:30 PM	0	5	16	7	0	5	10	2	0	4	23	8	0	0	19	6	105	1,088
4:35 PM	0	2	12	9	0	10	16	0	0	6	12	9	0	3	11	2	92	1,077
4:40 PM	0	4	17	9	0	10	10	1	0	9	10	10	0	2	17	1	100	1,069
4:45 PM	0	2	11	9	0	6	6	0	0	8	13	8	0	3	22	0	88	1,039
4:50 PM	0	2	9	9	0	7	5	4	0	3	13	9	0	6	23	0	90	1,039
4:55 PM	0	3	13	4	0	5	11	2	0	7	13	9	0	2	15	1	85	1,018
5:00 PM	0	1	8	4	0	8	6	1	0	6	26	9	0	0	16	1	86	1,003
5:05 PM	0	2	10	8	0	7	13	4	0	6	18	8	0	2	18	1	97	
5:10 PM	0	1	7	5	0	10	12	1	0	1	15	5	0	0	18	3	78	
5:15 PM	0	0	13	9	0	7	17	2	0	8	14	9	0	2	18	1	100	
5:20 PM	0	0	13	8	0	3	17	3	0	7	14	13	0	2	11	0	91	
5:25 PM	0	2	11	6	0	3	9	0	0	7	11	5	0	2	18	2	76	
5:30 PM	0	2	9	10	0	6	5	4	0	8	17	9	0	5	18	1	94	
5:35 PM	0	5	10	12	0	5	14	5	0	5	14	6	0	0	8	0	84	
5:40 PM	0	0	7	11	0	7	6	2	0	5	16	8	0	2	6	0	70	
5:45 PM	0	2	5	8	0	2	10	4	0	8	14	10	0	4	19	2	88	
5:50 PM	0	2	9	5	0	8	7	2	0	1	16	6	0	1	11	1	69	
5:55 PM	0	0	9	4	0	7	7	0	0	3	18	9	0	1	10	2	70	
Count Total	0	42	240	183	0	156	250	49	0	144	371	205	0	46	377	32	2,095	
Peak Hour	0	25	137	89	0	89	132	20	0	75	184	100	0	21	213	18	1,103	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	0	2	2	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	1	0	0	0	1	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	1	0	1	2	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	3	3
4:20 PM	0	0	0	1	1	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	0	1	0	1	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	1	1	0	1	3	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	2	0	0	2	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	1	1
4:40 PM	1	0	0	1	2	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	1	1
4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	0	0	1	1	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	1	0	0	1	2	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	1	0	0	1	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	0	0	1	1	5:05 PM	0	0	0	0	0	5:05 PM	0	0	1	0	1
5:10 PM	0	1	0	0	1	5:10 PM	0	0	1	0	1	5:10 PM	0	0	0	0	0
5:15 PM	0	1	0	0	1	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	0	0	1	1	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	1	0	1	2	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	1	1	2	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	1	0	0	1	5:40 PM	0	0	0	0	0	5:40 PM	0	1	0	0	1
5:45 PM	0	1	0	1	2	5:45 PM	0	0	0	0	0	5:45 PM	1	0	0	0	1
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	1	0	0	1	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	4	11	2	13	30	Count Total	0	0	1	0	1	Count Total	1	1	1	5	8
Peak Hour	3	6	1	6	16	Peak Hour	0	0	1	0	1	Peak Hour	0	0	1	2	3

File Name: E:\Survey\Projects\3606-00 La Quinta Inn\Traffic Counts\Myra&Poplar.ppd
Start Date: 1/16/2014
Start Time: 4:00:00 PM
Site Code: 00000012
Location Myra Rd / Poplar St - OUT
Peak Hour 4:15 P.M. - 5:15 P.M.
Comment: Observed Traffic from Southwest Corner of Intersection

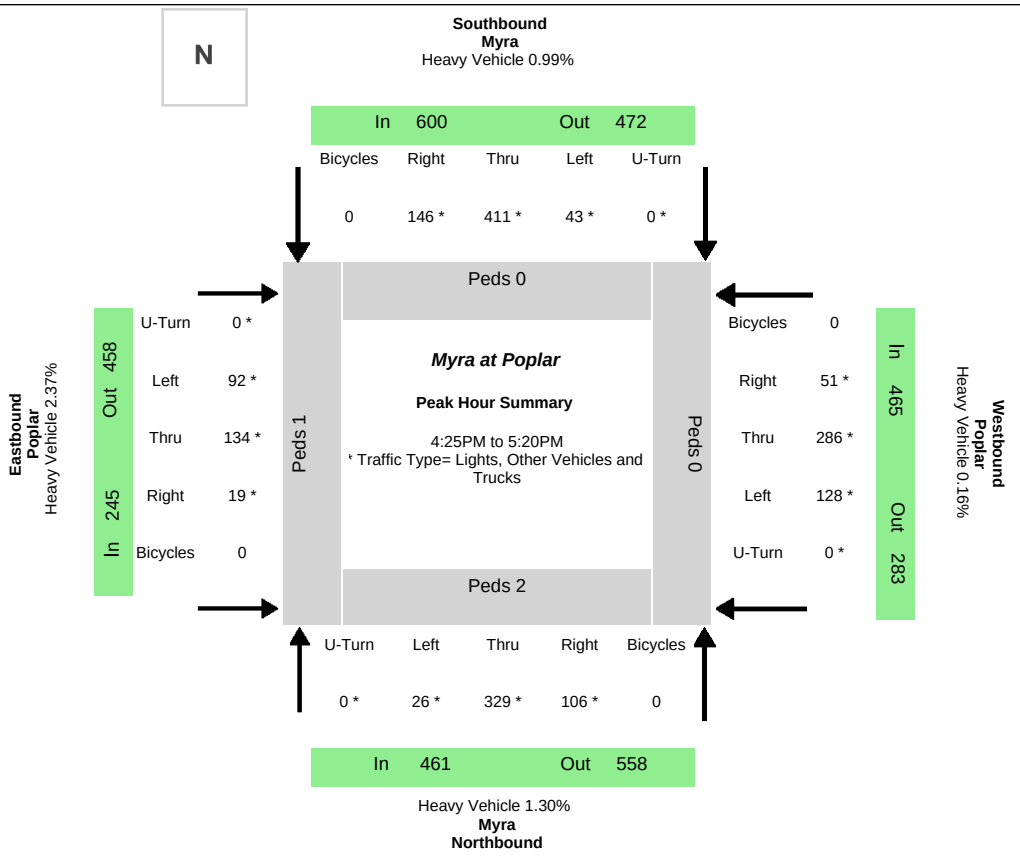
	From North				From East				From South				From West			
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
04:00 PM	35	80	13	1	13	50	47	1	34	53	5	0	8	50	29	0
04:15 PM	38	80	11	0	12	58	37	0	26	62	5	0	10	37	16	0
04:30 PM	35	67	12	1	30	68	39	0	27	51	5	0	3	34	17	0
04:45 PM	27	65	13	0	20	72	27	2	35	63	3	0	5	39	19	1
05:00 PM	44	104	25	1	7	80	37	0	24	56	5	0	3	52	26	0
PM Peak	144	316	61	2	69	278	140	2	112	232	18	0	21	162	78	1
05:15 PM	34	45	8	0	8	74	26	0	27	50	4	0	4	41	17	0
05:30 PM	40	51	4	0	7	55	25	0	19	48	5	0	5	42	17	0
05:45 PM	21	53	6	0	12	60	25	0	14	40	3	0	4	50	13	0

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
Study Name	***Myra at Poplar***
Location	46.052658 - -118.371235
Start Date	11/2/2016
Start Time	4:00PM

Key Data Summary

Peak Hour Start	4:25PM
Peak 15 Min Start	4:55PM
PHF (15-Min Int)	0.94



Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
26	329	106	0	43	411	146	0	92	134	19	0	128	286	51	0	461	600	245	465	558	472	458	283

Percent Heavy Vehicles

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
0.0%	6.1%	2.8%	0.0%	7.0%	4.1%	2.1%	0.0%	2.2%	0.7%	0.0%	0.0%	0.8%	0.3%	2.0%	0.0%	8.9%	13.2%	2.9%	3.1%	4.9%	10.2%	2.4%	10.6%

PHV - Pedestrians in Crosswalk

NB	SB	EB	WB
2	0	1	0

PHV- Bicycles

Northbound				Southbound				Eastbound				Westbound			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

All Vehicle Volumes

	Northbound Myra				Southbound Myra				Eastbound Poplar				Westbound Poplar			
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn
4:00PM	1	20	10	0	4	25	11	0	12	14	3	0	18	12	6	0
4:05PM	3	33	7	0	3	35	15	0	6	13	5	0	19	15	8	0
4:10PM	1	21	12	0	2	23	14	0	8	16	7	0	12	33	8	0
4:15PM	5	24	12	0	2	34	9	0	10	17	1	0	14	18	6	0
4:20PM	0	20	6	0	1	18	9	0	12	13	2	0	23	23	3	0
4:25PM	2	24	4	0	7	41	10	0	11	12	2	0	7	23	3	0
4:30PM	1	21	8	0	4	25	18	0	6	14	0	0	11	17	5	0
4:35PM	2	41	18	0	1	49	17	0	3	9	2	0	11	19	5	0
4:40PM	3	14	10	0	0	26	5	0	11	12	2	0	21	25	6	0
4:45PM	6	21	8	0	5	34	5	0	7	13	1	0	5	21	5	0

4:50PM	2	30	7	0	4	29	12	0	7	13	1	0	8	13	5	0
4:55PM	3	23	12	0	3	34	14	0	11	17	3	0	15	26	5	0
5:00PM	2	36	7	0	2	39	16	0	7	9	3	0	12	16	2	0
5:05PM	1	23	3	0	4	34	14	0	9	15	2	0	6	40	5	0
5:10PM	3	31	10	0	7	32	15	0	6	7	2	0	12	27	5	0
5:15PM	0	31	5	0	3	32	10	0	9	5	1	0	10	39	2	0
5:20PM	1	34	14	0	3	36	10	0	5	8	0	0	10	20	3	0
5:25PM	2	13	10	0	2	29	10	0	14	15	3	0	17	23	3	0
5:30PM	3	19	7	0	4	24	10	0	10	18	1	0	9	22	3	0
5:35PM	0	23	9	0	6	28	13	0	14	4	2	0	10	20	3	0
5:40PM	0	20	6	0	1	17	12	1	7	13	2	0	5	13	2	0
5:45PM	1	38	10	0	0	32	15	0	8	12	3	0	3	16	4	0
5:50PM	6	21	7	0	2	18	11	0	5	13	1	0	13	17	4	0
5:55PM	4	19	5	0	3	35	11	0	6	24	1	0	6	23	3	0

Bicycles on Road

	Northbound				**Southbound**				**Eastbound**				**Westbound**			
	Myra				Myra				Poplar				Poplar			
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn
4:00PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:05PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:10PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:20PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
4:25PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:35PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:40PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:50PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:55PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:05PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:10PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:20PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:25PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:35PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:40PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:55PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Lights

	Northbound				**Southbound**				**Eastbound**				**Westbound**			
	Myra				Myra				Poplar				Poplar			
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn
4:00PM	1	16	9	0	4	24	11	0	12	14	3	0	18	12	6	0
4:05PM	3	31	7	0	3	33	15	0	6	13	5	0	19	14	8	0
4:10PM	1	19	12	0	2	23	14	0	8	16	7	0	12	33	8	0
4:15PM	5	23	12	0	2	33	9	0	10	16	1	0	14	18	6	0
4:20PM	0	18	6	0	1	17	9	0	12	13	2	0	23	23	3	0
4:25PM	2	24	4	0	6	40	10	0	11	12	2	0	7	23	3	0
4:30PM	1	21	7	0	4	24	17	0	6	14	0	0	11	17	5	0
4:35PM	2	40	17	0	1	47	17	0	2	8	2	0	11	19	5	0
4:40PM	3	12	10	0	0	26	5	0	10	12	2	0	21	25	6	0
4:45PM	6	19	8	0	5	33	5	0	7	13	1	0	5	21	5	0
4:50PM	2	28	7	0	4	26	12	0	7	13	1	0	8	13	5	0
4:55PM	3	20	12	0	3	31	13	0	11	17	3	0	15	25	5	0
5:00PM	2	33	6	0	2	38	16	0	7	9	3	0	12	16	1	0
5:05PM	1	21	3	0	4	34	13	0	9	15	2	0	6	40	5	0
5:10PM	3	29	10	0	6	30	15	0	6	7	2	0	12	27	5	0
5:15PM	0	28	5	0	2	31	10	0	9	5	1	0	10	39	2	0
5:20PM	1	34	14	0	3	34	10	0	5	8	0	0	9	20	3	0
5:25PM	2	13	10	0	2	29	10	0	14	15	3	0	17	23	3	0

5:30PM	3	18	6	0	4	23	10	0	10	18	1	0	9	22	3	0
5:35PM	0	22	9	0	6	28	13	0	14	4	2	0	9	20	3	0
5:40PM	0	19	6	0	1	17	12	1	7	13	2	0	5	13	2	0
5:45PM	1	36	10	0	0	30	14	0	8	12	3	0	3	16	4	0
5:50PM	6	21	7	0	2	17	11	0	5	13	1	0	13	17	4	0
5:55PM	4	19	5	0	3	33	11	0	6	24	1	0	6	22	3	0

Other Vehicles

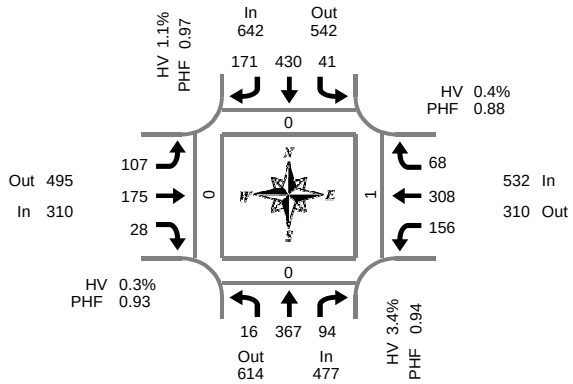
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
	Myra				Myra				Poplar				Poplar			
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn
4:00PM	0	4	1	0	0	1	0	0	0	0	0	0	0	0	0	0
4:05PM	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	0
4:10PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15PM	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0
4:20PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0
4:25PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
4:30PM	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0
4:35PM	0	1	1	0	0	2	0	0	1	1	0	0	0	0	0	0
4:40PM	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0
4:45PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0
4:50PM	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0
4:55PM	0	3	0	0	0	3	1	0	0	0	0	0	0	1	0	0
5:00PM	0	3	1	0	0	1	0	0	0	0	0	0	0	0	1	0
5:05PM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0
5:10PM	0	2	0	0	1	2	0	0	0	0	0	0	0	0	0	0
5:15PM	0	3	0	0	1	1	0	0	0	0	0	0	0	0	0	0
5:20PM	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0
5:25PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30PM	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0
5:35PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
5:40PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45PM	0	2	0	0	0	2	1	0	0	0	0	0	0	0	0	0
5:50PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
5:55PM	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0

Pedestrians Crossing

Time	NB	SB	EB	WB
4:00PM	1	0	0	0
4:05PM	0	0	0	5
4:10PM	0	0	0	0
4:15PM	0	0	0	0
4:20PM	0	0	0	0
4:25PM	1	0	0	0
4:30PM	0	0	0	0
4:35PM	0	0	0	0
4:40PM	0	0	1	0
4:45PM	0	0	0	0
4:50PM	0	0	0	0
4:55PM	0	0	0	0
5:00PM	0	0	0	0
5:05PM	1	0	0	0
5:10PM	0	0	0	0
5:15PM	0	0	0	0
5:20PM	0	0	0	0
5:25PM	0	0	0	0
5:30PM	0	0	0	1
5:35PM	0	0	0	3
5:40PM	0	0	0	0
5:45PM	0	0	2	0
5:50PM	0	0	0	0
5:55PM	0	1	0	0

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
4:30 PM to 5:30 PM

Myra Rd & C St

Wednesday, December 12, 2018
4:00 PM to 6:00 PM

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Myra Rd				Southbound Myra Rd				Eastbound C St				Westbound C St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	10	92	24	0	19	92	40	1	31	39	10	0	58	73	17	0	505	0	0	0	0
4:15 PM	8	79	21	0	13	93	38	0	28	38	5	0	47	66	10	0	446	0	0	0	0
4:30 PM	4	102	19	0	12	109	37	0	28	42	11	0	45	81	19	0	509	0	0	1	0
4:45 PM	3	88	18	0	11	113	42	0	26	51	6	0	25	82	25	0	490	0	0	0	0
5:00 PM	6	86	24	0	7	103	47	0	24	37	7	0	52	85	14	0	492	0	0	0	0
5:15 PM	3	91	33	0	11	105	45	0	29	45	4	0	34	60	10	0	470	0	0	0	0
5:30 PM	3	72	20	0	7	89	45	0	22	35	6	0	29	65	9	0	402	0	0	0	0
5:45 PM	4	70	19	0	14	72	31	0	27	43	5	0	18	48	7	0	358	0	0	0	0
Total Survey	41	680	178	0	94	776	325	1	215	330	54	0	308	560	111	0	3,672	0	0	1	0

Peak Hour Summary
4:30 PM to 5:30 PM

By Approach	Northbound Myra Rd				Southbound Myra Rd				Eastbound C St				Westbound C St				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	477	614	1,091	0	642	542	1,184	0	310	495	805	0	532	310	842	0	1,961	0	0	1	0
%HV	3.4%				1.1%				0.3%				0.4%				1.3%				
PHF	0.94				0.97				0.93				0.88				0.96				

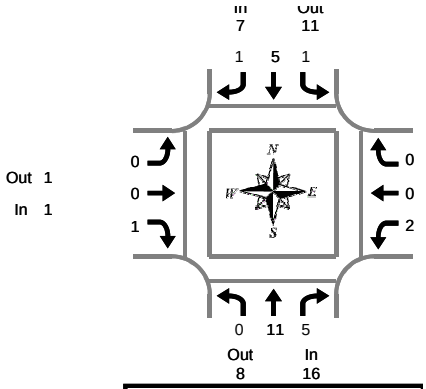
By Movement	Northbound Myra Rd				Southbound Myra Rd				Eastbound C St				Westbound C St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	16	367	94	477	41	430	171	642	107	175	28	310	156	308	68	532	1,961
%HV	0.0%	3.0%	5.3%	3.4%	2.4%	1.2%	0.6%	1.1%	0.0%	0.0%	3.6%	0.3%	1.3%	0.0%	0.0%	0.4%	1.3%
PHF	0.67	0.90	0.71	0.94	0.85	0.95	0.91	0.97	0.92	0.86	0.64	0.93	0.75	0.91	0.68	0.88	0.96

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Myra Rd				Southbound Myra Rd				Eastbound C St				Westbound C St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	25	361	82	0	55	407	157	1	113	170	32	0	175	302	71	0	1,950	0	0	1	0
4:15 PM	21	355	82	0	43	418	164	0	106	168	29	0	169	314	68	0	1,937	0	0	1	0
4:30 PM	16	367	94	0	41	430	171	0	107	175	28	0	156	308	68	0	1,961	0	0	1	0
4:45 PM	15	337	95	0	36	410	179	0	101	168	23	0	140	292	58	0	1,854	0	0	0	0
5:00 PM	16	319	96	0	39	369	168	0	102	160	22	0	133	258	40	0	1,722	0	0	0	0

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



Myra Rd & C St

Wednesday, December 12, 2018
4:00 PM to 6:00 PM

Peak Hour Summary
4:30 PM to 5:30 PM

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Myra Rd				Southbound Myra Rd				Eastbound C St				Westbound C St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	1	6	2	9	0	2	1	3	1	1	0	2	0	2	1	3	17
4:15 PM	0	5	0	5	1	3	1	5	0	1	0	1	2	0	0	2	13
4:30 PM	0	4	2	6	1	0	0	1	0	0	0	0	1	0	0	1	8
4:45 PM	0	3	0	3	0	3	0	3	0	0	1	1	1	0	0	1	8
5:00 PM	0	3	3	6	0	2	0	2	0	0	0	0	0	0	0	0	8
5:15 PM	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	1	1	0	2	0	2	1	0	0	1	0	0	0	0	4
Total Survey	1	22	9	32	2	12	3	17	2	2	1	5	4	2	1	7	61

Heavy Vehicle Peak Hour Summary
4:30 PM to 5:30 PM

By Approach	Northbound Myra Rd			Southbound Myra Rd			Eastbound C St			Westbound C St			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	16	8	24	7	11	18	1	1	2	2	6	8	26
PHF	0.20			0.19			0.08			0.08			0.17

By Movement	Northbound Myra Rd				Southbound Myra Rd				Eastbound C St				Westbound C St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	11	5	16	1	5	1	7	0	0	1	1	2	0	0	2	26
PHF	0.00	0.18	0.25	0.20	0.13	0.21	0.13	0.19	0.00	0.00	0.25	0.08	0.13	0.00	0.00	0.08	0.17

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Myra Rd				Southbound Myra Rd				Eastbound C St				Westbound C St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	1	18	4	23	2	8	2	12	1	2	1	4	4	2	1	7	46
4:15 PM	0	15	5	20	2	8	1	11	0	1	1	2	4	0	0	4	37
4:30 PM	0	11	5	16	1	5	1	7	0	0	1	1	2	0	0	2	26
4:45 PM	0	7	4	11	0	5	1	6	0	0	1	1	1	0	0	1	19
5:00 PM	0	4	5	9	0	4	1	5	1	0	0	1	0	0	0	0	15

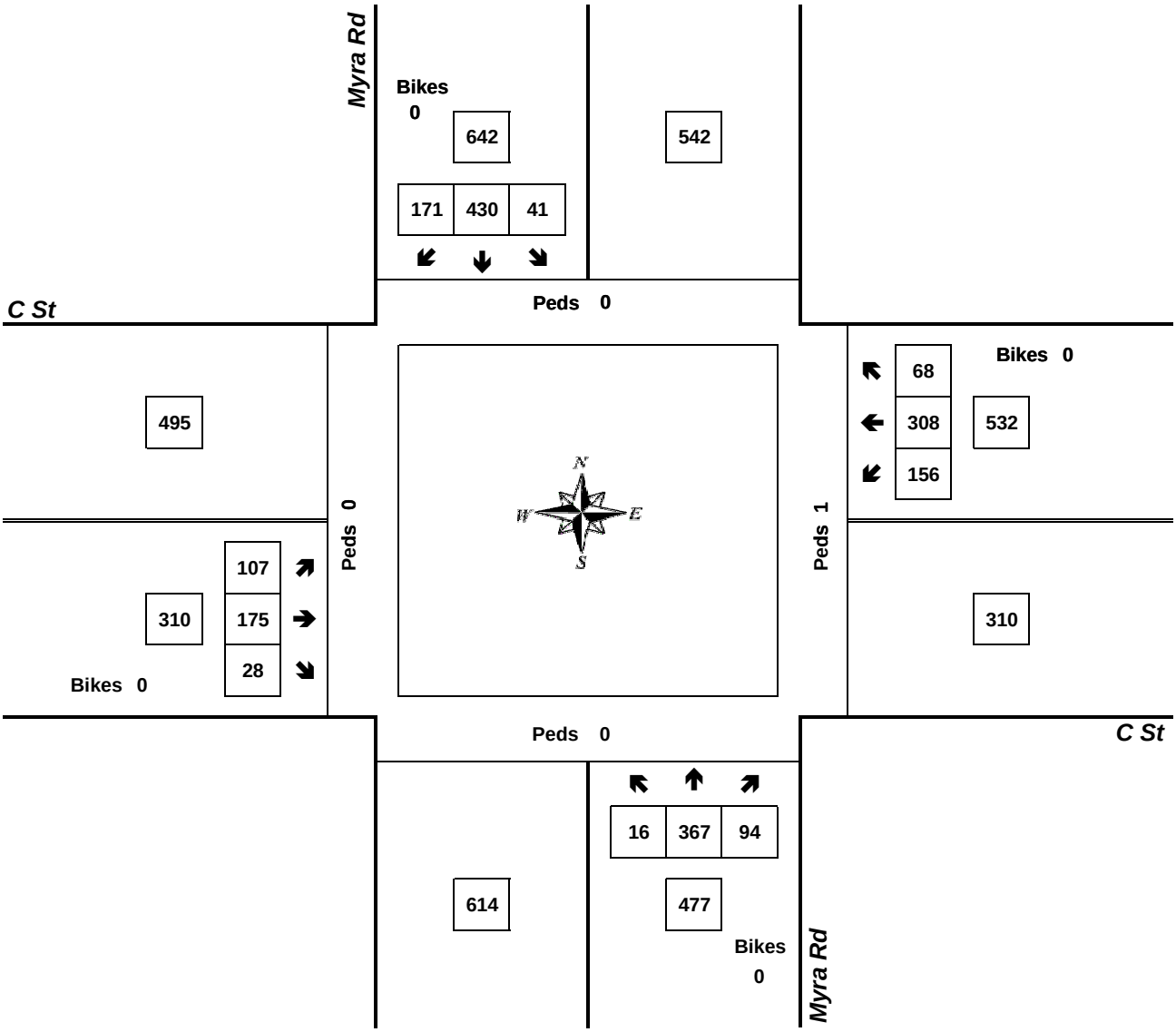
Peak Hour Summary

All Traffic Data Services Inc.

Clay Carney
(503) 833-2740

Myra Rd & C St

4:30 PM to 5:30 PM
Wednesday, December 12, 2018



Approach	PHF	HV%	Volume
EB	0.93	0.3%	310
WB	0.88	0.4%	532
NB	0.94	3.4%	477
SB	0.97	1.1%	642
Intersection	0.96	1.3%	1,961

Count Period: 4:00 PM to 6:00 PM

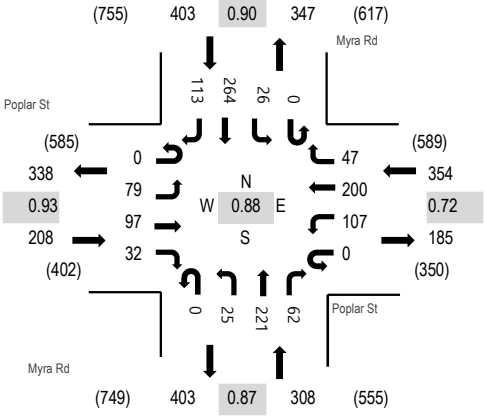
All Traffic Data Services Inc.

(303) 216-2439
www.alltrafficdata.net

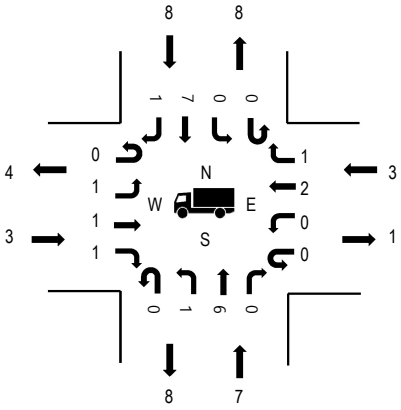
Location: Myra Rd & Poplar St PM
Date: Tuesday, March 31, 2020
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

Peak Hour

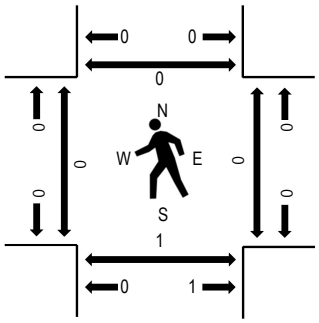
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	1.4%	0.93
WB	0.8%	0.72
NB	2.3%	0.87
SB	2.0%	0.90
All	1.6%	0.88

Traffic Counts - Motorized Vehicles

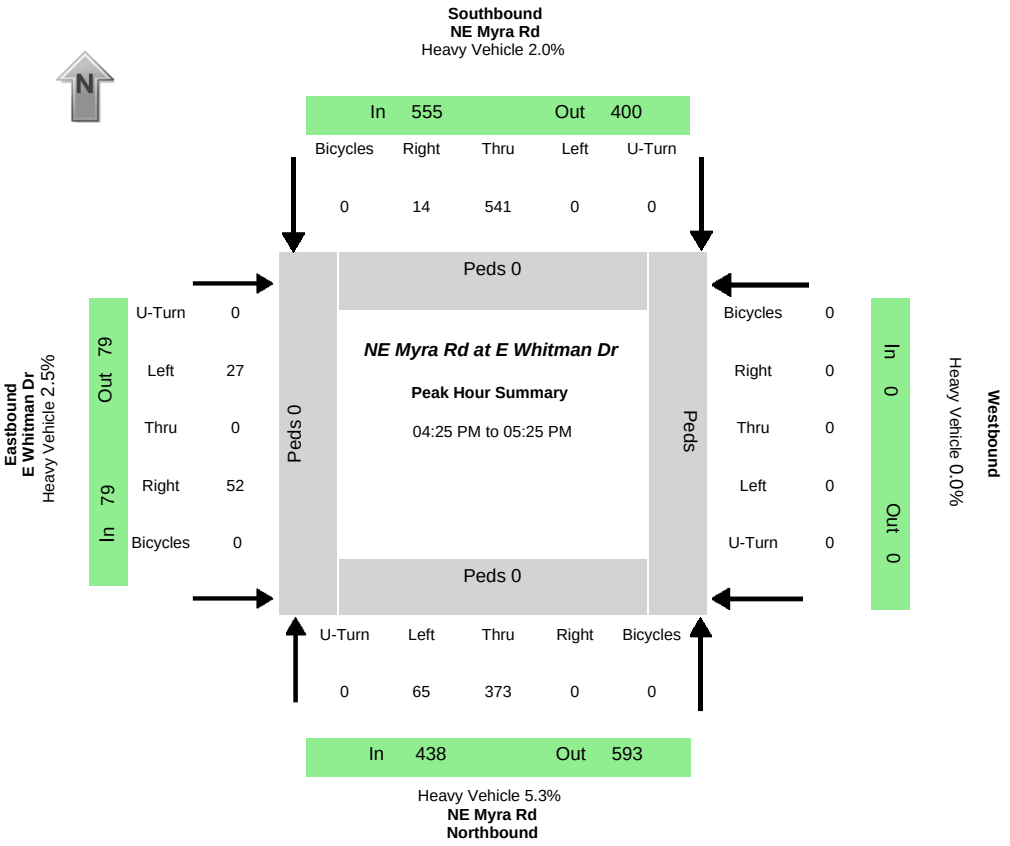
Interval Start Time	Poplar St Eastbound				Poplar St Westbound				Myra Rd Northbound				Myra Rd Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	6	8	5	0	12	13	4	0	1	20	10	0	4	22	8	113	1,241
4:05 PM	0	3	7	1	0	7	11	3	0	1	17	3	0	4	28	10	95	1,230
4:10 PM	0	6	9	3	0	12	13	1	0	5	20	5	0	3	17	7	101	1,254
4:15 PM	0	4	8	0	0	12	10	4	0	0	20	4	0	3	27	11	103	1,273
4:20 PM	0	4	8	3	0	7	15	4	0	0	15	2	0	2	27	6	93	1,258
4:25 PM	0	5	9	0	0	6	18	1	0	0	15	4	0	2	22	7	89	1,261
4:30 PM	0	5	7	3	0	17	18	5	0	2	19	10	0	1	21	8	116	1,266
4:35 PM	0	11	9	5	0	13	22	15	0	3	20	5	0	1	17	13	134	1,229
4:40 PM	0	7	6	3	0	13	16	4	0	6	15	9	0	5	19	10	113	1,180
4:45 PM	0	9	7	2	0	10	17	3	0	1	13	5	0	2	15	11	95	1,136
4:50 PM	0	6	11	2	0	10	14	4	0	4	17	6	0	2	20	8	104	1,112
4:55 PM	0	3	6	5	0	4	11	2	0	1	20	2	0	2	19	10	85	1,086
5:00 PM	0	10	12	4	0	6	14	2	0	1	19	3	0	1	23	7	102	1,060
5:05 PM	0	5	5	2	0	4	21	1	0	6	32	7	0	1	24	11	119	
5:10 PM	0	10	9	3	0	5	24	2	0	1	16	5	0	4	30	11	120	
5:15 PM	0	5	11	0	0	8	14	1	0	0	18	2	0	3	20	6	88	
5:20 PM	0	5	11	4	0	8	10	0	0	1	19	4	0	1	24	9	96	
5:25 PM	0	14	10	1	0	7	9	0	0	3	20	1	0	1	16	12	94	
5:30 PM	0	5	6	2	0	11	15	0	0	3	14	4	0	1	9	9	79	
5:35 PM	0	6	9	1	0	7	15	4	0	2	14	2	0	2	15	8	85	
5:40 PM	0	3	3	1	0	5	12	0	0	1	11	4	0	0	24	5	69	
5:45 PM	0	6	6	4	0	9	8	1	0	1	6	1	0	3	18	8	71	
5:50 PM	0	11	8	3	0	1	5	0	0	0	18	7	0	1	17	7	78	
5:55 PM	0	3	6	2	0	3	5	1	0	3	5	1	0	4	19	7	59	
Count Total	0	152	191	59	0	197	330	62	0	46	403	106	0	53	493	209	2,301	
Peak Hour	0	79	97	32	0	107	200	47	0	25	221	62	0	26	264	113	1,273	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	1	0	0	1	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	2	1	1	4	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	3	0	0	3	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	0	0	2	2	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	1	2	1	0	4	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	1	0	0	1	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	1	1	1	3	4:35 PM	0	0	0	0	0	4:35 PM	0	1	0	0	1
4:40 PM	0	0	0	1	1	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	1	1	1	1	4	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	1	0	0	1	2	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	2	0	0	2	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	0	0	2	2	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	1	0	0	1	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	1	0	0	0	1
5:25 PM	0	1	0	1	2	5:25 PM	0	0	0	0	0	5:25 PM	0	1	0	0	1
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	1	0	0	0	1	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	0	1	1	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	3	3	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	4	15	4	14	37	Count Total	0	0	0	0	0	Count Total	1	2	0	0	3
Peak Hour	3	7	3	8	21	Peak Hour	0	0	0	0	0	Peak Hour	0	1	0	0	1

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NE Myra Rd*
E/W street	*E Whitman Dr*
City, State	Walla Walla WA
Site Notes	
Location	46.050527 - -118.369561
Start Date	Wednesday, August 02, 2017
Start Time	04:00:00 PM
Weather	
Study ID #	
Peak Hour Start	04:25:00 PM
Peak 15 Min Start	05:05:00 PM
PHF (15-Min Int)	0.85



Peak-Hour Volumes (PHV)																							
Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
65	373	0	0	0	541	14	0	27	0	52	0	0	0	0	0	438	555	79	0	593	400	79	0
Percent Heavy Vehicles																							
1.5%	5.9%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	3.7%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	2.0%	2.5%	0.0%	2.0%	5.8%	1.3%	0.0%

PHV- Bicycles																PHV - Pedestrians					
Northbound				Southbound				Eastbound				Westbound					in Crosswalk				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	NB	SB	EB	WB	Sum
0	0		0		0	0	0	0		0	0					0	0	0	0		0

All Vehicle Volumes

	Northbound NE Myra Rd				Southbound NE Myra Rd				Eastbound E Whitman Dr				Westbound				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
04:00:00 PM	1	18		0		35	0	0	7		6	0						
04:05:00 PM	5	32		0		56	2	0	0		4	0						
04:10:00 PM	3	34		0		40	2	0	2		5	0					252	
04:15:00 PM	4	32		0		49	1	0	5		4	0					280	
04:20:00 PM	4	25		0		43	3	0	1		2	0					259	
04:25:00 PM	2	34		0		43	0	0	4		4	0					260	
04:30:00 PM	5	26		0		39	2	0	1		1	0					239	
04:35:00 PM	7	24		0		38	3	0	1		8	0					242	
04:40:00 PM	10	33		0		45	1	0	2		2	0					248	
04:45:00 PM	5	20		0		53	1	0	3		6	0					262	
04:50:00 PM	1	39		0		41	1	0	0		7	0					270	
04:55:00 PM	4	30		0		37	1	0	1		2	0					252	1012
05:00:00 PM	7	24		0		36	1	0	2		5	0					239	1020
05:05:00 PM	5	41		0		52	1	0	3		6	0					258	1029
05:10:00 PM	6	27		0		61	0	0	2		6	0					285	1045
05:15:00 PM	10	49		0		39	2	0	3		3	0					316	1056
05:20:00 PM	3	26		0		57	1	0	5		2	0					302	1072
05:25:00 PM	8	24		0		39	3	0	3		3	0					280	1065
05:30:00 PM	5	26		0		36	1	0	5		5	0					252	1069
05:35:00 PM	6	20		0		36	0	0	3		2	0					225	1055
05:40:00 PM	3	29		0		36	2	0	6		8	0					229	1046
05:45:00 PM	6	40		0		38	2	0	0		5	0					242	1049
05:50:00 PM	4	31		0		28	1	0	7		9	1					256	1041
05:55:00 PM	2	22		0		32	2	0	7		6	0					243	1037

Type of peak hour being reported: Intersection Peak

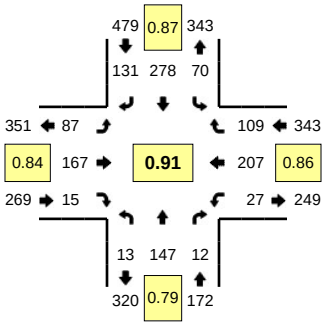
Method for determining peak hour: Total Entering Volume

LOCATION: SE Myra Rd -- Dallas Military Rd

QC JOB #: 10591902

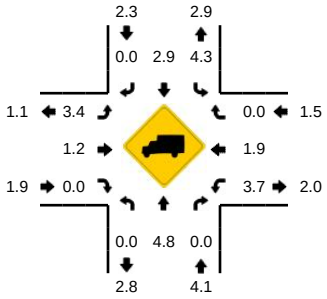
CITY/STATE: Walla Walla, WA

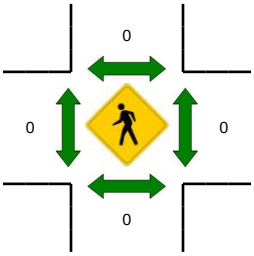
DATE: 3/15/2011

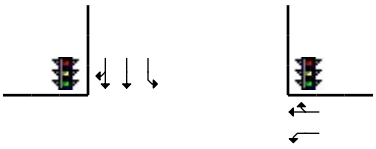


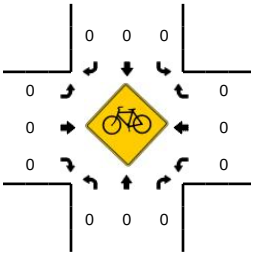
Peak-Hour: 4:35 PM -- 5:35 PM

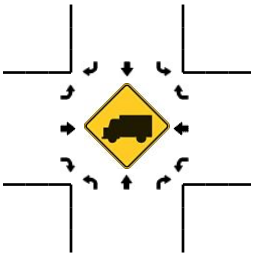
Peak 15-Min: 5:05 PM -- 5:20 PM

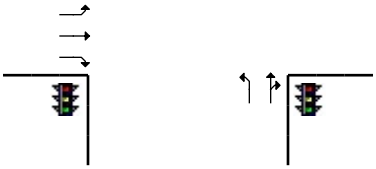


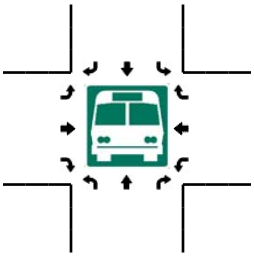












5-Min Count Period Beginning At	SE Myra Rd (Northbound)				SE Myra Rd (Southbound)				Dallas Military Rd (Eastbound)				Dallas Military Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	2	6	1	0	6	17	7	0	6	16	1	0	2	22	10	0	96	
4:05 PM	0	12	2	0	4	34	7	0	8	11	1	0	1	15	7	0	102	
4:10 PM	4	19	2	0	3	24	12	0	8	16	1	0	4	26	8	0	127	
4:15 PM	0	15	1	0	5	16	9	0	3	19	2	0	4	22	7	0	103	
4:20 PM	0	16	1	0	7	18	7	0	7	15	2	0	0	13	4	0	90	
4:25 PM	0	12	0	0	3	21	9	0	7	12	2	0	0	10	6	0	82	
4:30 PM	1	10	1	0	6	23	11	0	7	11	1	0	5	11	9	0	96	
4:35 PM	0	14	0	0	8	25	14	0	3	17	0	0	1	13	11	0	106	
4:40 PM	0	19	2	0	1	23	12	0	7	12	1	0	3	21	7	0	108	
4:45 PM	2	14	0	0	8	27	12	0	8	12	2	0	0	11	2	0	98	
4:50 PM	1	18	6	0	6	9	6	0	9	19	0	0	2	16	10	0	102	
4:55 PM	2	10	1	0	8	27	8	0	5	14	0	0	0	17	9	0	101	1211
5:00 PM	0	10	1	0	7	24	6	0	9	14	1	0	3	20	12	0	107	1222
5:05 PM	0	15	0	0	5	27	9	0	12	12	4	0	4	12	10	0	110	1230
5:10 PM	1	7	0	0	6	27	18	0	9	20	2	0	2	22	9	0	123	1226
5:15 PM	1	17	0	0	7	24	15	0	5	9	2	0	1	21	13	0	115	1238
5:20 PM	1	6	0	0	4	19	13	0	6	12	0	0	5	22	5	0	93	1241
5:25 PM	3	9	2	0	5	21	10	0	8	12	0	0	2	17	12	0	101	1260
5:30 PM	2	8	0	0	5	25	8	0	6	14	3	0	4	15	9	0	99	1263
5:35 PM	0	14	4	0	3	15	9	0	3	18	0	0	3	12	4	0	85	1242
5:40 PM	3	12	2	0	7	8	18	0	6	12	1	0	1	16	13	0	99	1233
5:45 PM	0	10	1	0	3	20	10	0	4	11	0	0	1	13	7	0	80	1215
5:50 PM	1	12	0	0	4	9	6	0	1	12	2	0	0	12	6	0	65	1178
5:55 PM	0	7	1	0	4	12	7	0	8	9	0	0	2	11	8	0	69	1146

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	8	156	0	0	72	312	168	0	104	164	32	0	28	220	128	0	1392
Heavy Trucks	0	4	0		0	16	0		4	0	0		0	0	0		24
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

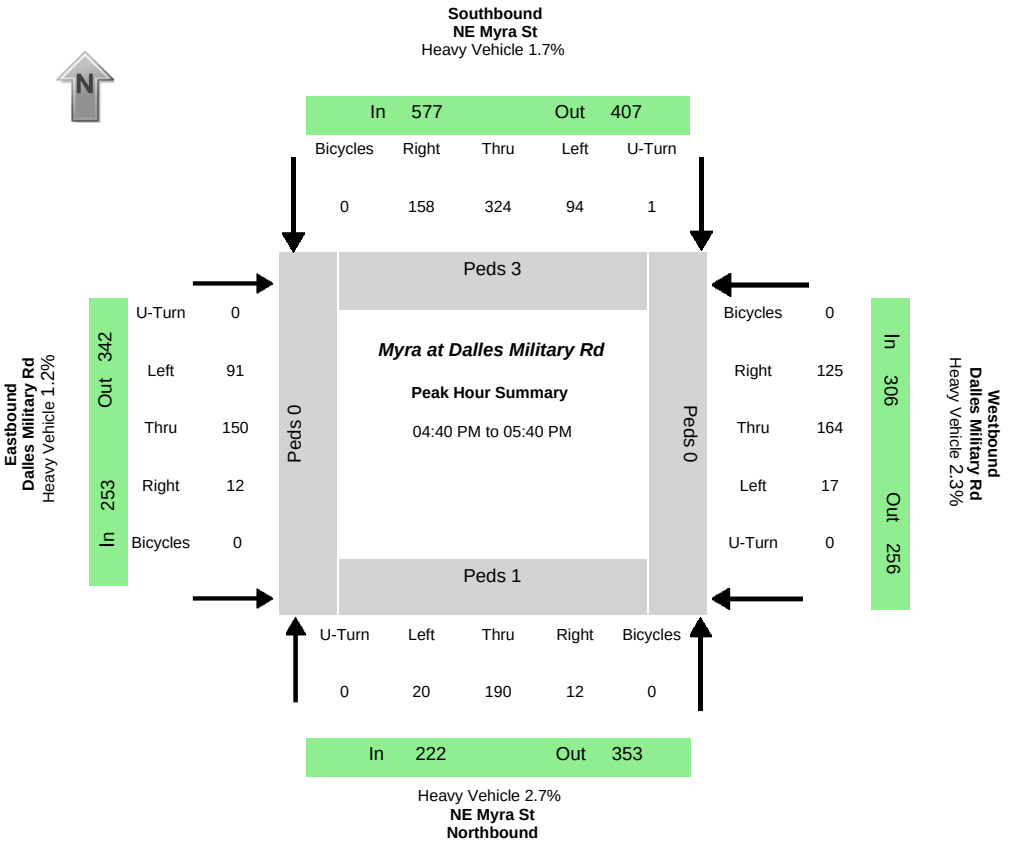
Comments:

Report generated on 3/21/2011 2:44 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street	*NE Myra St*
E/W street	*Dalles Military Rd*
City, State	Walla Walla WA
Site Notes	
Location	46.043201 - -118.364334
Start Date	Tuesday, August 01, 2017
Start Time	04:00:00 PM
Weather	
Study ID #	
Peak Hour Start	04:40:00 PM
Peak 15 Min Start	05:10:00 PM
PHF (15-Min Int)	0.94



Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
20	190	12	0	94	324	158	1	91	150	12	0	17	164	125	0	222	577	253	306	353	407	342	256

Percent Heavy Vehicles

0.0%	3.2%	0.0%	0.0%	1.1%	2.5%	0.6%	0.0%	1.1%	1.3%	0.0%	0.0%	0.0%	1.8%	3.2%	0.0%	2.7%	1.7%	1.2%	2.3%	2.3%	2.7%	1.2%	1.2%

PHV- Bicycles

Northbound				Southbound				Eastbound				Westbound				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	**Sum**
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PHV - Pedestrians

in Crosswalk				
NB	SB	EB	WB	**Sum**
1	3	0	0	4

All Vehicle Volumes

	Northbound NE Myra St				Southbound NE Myra St				Eastbound Dalles Military Rd				Westbound Dalles Military Rd				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
04:00:00 PM	1	13	1	0	10	30	6	0	7	9	4	0	1	9	6	0		
04:05:00 PM	0	21	2	0	9	39	9	0	9	15	1	0	4	12	8	0		
04:10:00 PM	2	16	2	0	6	31	14	0	8	10	0	0	2	16	11	0	344	
04:15:00 PM	1	20	1	0	4	31	16	0	8	8	1	0	0	12	7	0	356	
04:20:00 PM	1	6	1	0	9	26	10	0	12	11	2	0	4	15	7	0	331	
04:25:00 PM	4	12	4	0	15	25	13	0	7	9	1	0	0	11	5	0	319	
04:30:00 PM	1	13	1	0	8	17	10	0	9	14	2	0	3	13	9	0	310	
04:35:00 PM	0	15	2	0	8	21	15	0	8	12	3	0	2	11	4	0	307	
04:40:00 PM	1	21	2	0	5	24	12	0	7	16	2	0	1	9	8	0	309	
04:45:00 PM	1	14	1	0	14	18	10	0	6	12	0	0	1	15	10	0	311	
04:50:00 PM	0	30	1	0	8	35	10	0	4	14	4	0	3	7	13	0	339	
04:55:00 PM	0	11	1	0	3	18	15	1	13	12	1	0	0	9	10	0	325	1297
05:00:00 PM	2	12	1	0	7	26	5	0	2	13	0	0	0	21	12	0	324	1301
05:05:00 PM	2	13	1	0	9	24	11	0	12	11	1	0	1	24	11	0	315	1292
05:10:00 PM	2	17	0	0	8	42	19	0	11	12	0	0	1	13	11	0	357	1310
05:15:00 PM	1	10	1	0	5	24	17	0	5	19	0	0	3	13	8	0	362	1307
05:20:00 PM	1	11	1	0	7	34	19	0	9	9	0	0	4	14	12	0	363	1324
05:25:00 PM	5	19	0	0	14	28	11	0	4	15	2	0	1	13	15	0	354	1345
05:30:00 PM	1	13	2	0	4	21	13	0	8	12	1	0	0	17	11	0	351	1348
05:35:00 PM	4	19	1	0	10	30	16	0	10	5	1	0	2	9	4	0	341	1358
05:40:00 PM	1	7	0	0	6	15	10	0	5	12	2	0	2	20	11	0	305	1341
05:45:00 PM	1	16	2	0	8	31	11	0	7	12	3	0	0	11	8	0	312	1349
05:50:00 PM	0	14	1	0	5	16	14	0	5	7	0	0	3	18	10	0	294	1313
05:55:00 PM	4	21	1	0	7	19	12	0	9	14	2	0	1	10	6	0	309	1325

Type of peak hour being reported: Intersection Peak

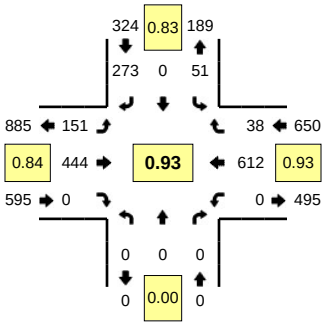
Method for determining peak hour: Total Entering Volume

LOCATION: SE Myra Rd -- SR 125

QC JOB #: 10591904

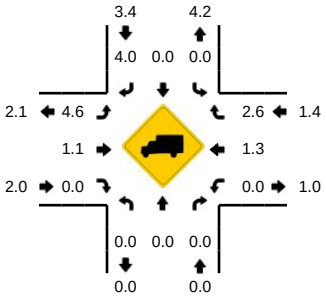
CITY/STATE: Walla Walla, WA

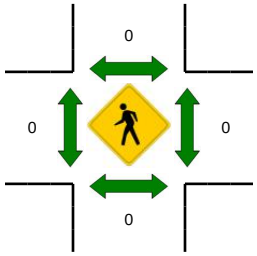
DATE: 3/15/2011

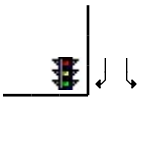


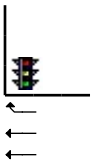
Peak-Hour: 4:20 PM -- 5:20 PM

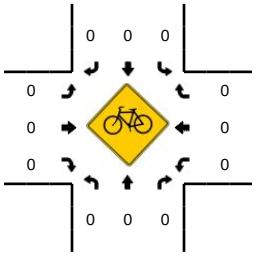
Peak 15-Min: 5:05 PM -- 5:20 PM

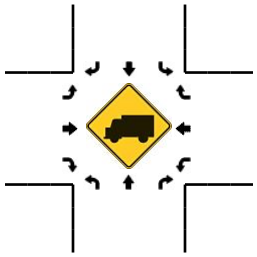


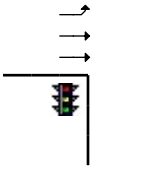


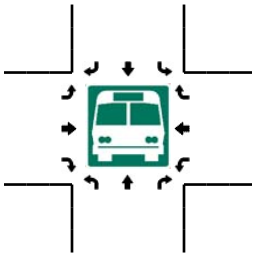












5-Min Count Period Beginning At	SE Myra Rd (Northbound)				SE Myra Rd (Southbound)				SR 125 (Eastbound)				SR 125 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	1	0	28	0	8	30	0	0	0	32	4	0	103	
4:05 PM	0	0	0	0	6	0	25	0	11	27	0	0	0	34	2	0	105	
4:10 PM	0	0	0	0	5	0	26	0	18	35	0	0	1	53	4	0	142	
4:15 PM	0	0	0	0	9	0	28	0	12	30	0	0	0	38	6	0	123	
4:20 PM	0	0	0	0	6	0	12	0	13	38	0	0	0	51	10	0	130	
4:25 PM	0	0	0	0	7	0	20	0	11	30	0	0	0	40	3	0	111	
4:30 PM	0	0	0	0	5	0	23	0	10	39	0	0	0	67	3	0	147	
4:35 PM	0	0	0	0	1	0	31	0	15	39	0	0	0	44	3	0	133	
4:40 PM	0	0	0	0	5	0	23	0	19	35	0	0	0	54	2	0	138	
4:45 PM	0	0	0	0	3	0	14	0	14	47	0	0	0	53	2	0	133	
4:50 PM	0	0	0	0	8	0	21	0	22	40	0	0	0	38	0	0	129	
4:55 PM	0	0	0	0	0	0	20	0	7	41	0	0	0	49	4	0	121	1515
5:00 PM	0	0	0	0	2	0	26	0	11	19	0	0	0	44	5	0	107	1519
5:05 PM	0	0	0	0	3	0	22	0	11	40	0	0	0	49	2	0	127	1541
5:10 PM	0	0	0	0	4	0	33	0	7	37	0	0	0	74	2	0	157	1556
5:15 PM	0	0	0	0	7	0	28	0	11	39	0	0	0	49	2	0	136	1569
5:20 PM	0	0	0	0	6	0	23	0	8	26	0	0	0	49	3	0	115	1554
5:25 PM	0	0	0	0	2	0	17	0	6	31	0	0	0	66	4	0	126	1569
5:30 PM	0	0	0	0	4	0	21	0	8	28	0	0	0	37	0	0	98	1520
5:35 PM	0	0	0	0	2	0	19	0	16	29	0	0	0	43	1	0	110	1497
5:40 PM	0	0	0	0	5	0	11	0	14	48	0	0	0	50	3	0	131	1490
5:45 PM	0	0	0	0	3	0	12	0	8	30	0	0	0	44	1	0	98	1455
5:50 PM	0	0	0	0	6	0	10	0	9	35	0	0	0	36	4	0	100	1426
5:55 PM	0	0	0	0	2	0	16	0	6	24	0	0	0	42	2	0	92	1397

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	56	0	332	0	116	464	0	0	0	688	24	0	1680
Heavy Trucks	0	0	0		0	0	24		0	0	0		0	0	4		28
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

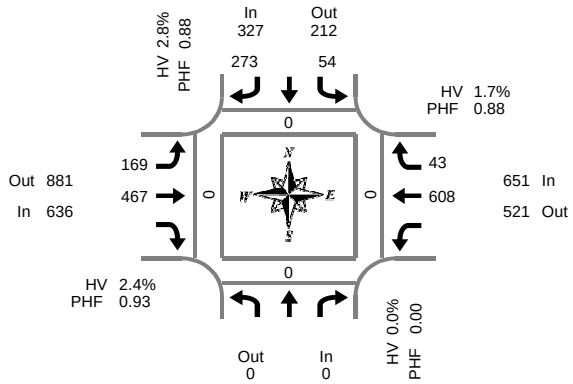
Comments:

Report generated on 3/21/2011 2:44 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
4:30 PM to 5:30 PM

SE Myra Rd & SR-125

Thursday, February 26, 2015
4:00 PM to 6:00 PM

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE Myra Rd				Southbound SE Myra Rd				Eastbound SR-125				Westbound SR-125				Interval Total	Pedestrians Crosswalk			
				Bikes	L		R	Bikes	L	T		Bikes		T	R	Bikes		North	South	East	West
4:00 PM				0	5		76	0	32	125		0		125	8	0	371	0	0	0	0
4:15 PM				0	14		68	0	35	114		0		144	13	0	388	0	0	0	0
4:30 PM				0	10		80	0	45	100		0		161	13	0	409	0	0	0	0
4:45 PM				0	15		59	0	39	132		0		120	8	0	373	0	0	0	0
5:00 PM				0	17		76	0	43	125		0		155	9	0	425	0	0	0	0
5:15 PM				0	12		58	0	42	110		0		172	13	0	407	0	0	0	0
5:30 PM				0	12		56	0	35	94		0		141	10	0	348	0	0	0	0
5:45 PM				0	12		54	0	38	88		0		136	9	0	337	0	0	0	0
Total Survey				0	97		527	0	309	888		0		1,154	83	0	3,058	0	0	0	0

Peak Hour Summary
4:30 PM to 5:30 PM

By Approach	Northbound SE Myra Rd				Southbound SE Myra Rd				Eastbound SR-125				Westbound SR-125				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	0	0	0	0	327	212	539	0	636	881	1,517	0	651	521	1,172	0	1,614	0	0	0	0
%HV	0.0%				2.8%				2.4%				1.7%				2.2%				
PHF	0.00				0.88				0.93				0.88				0.95				

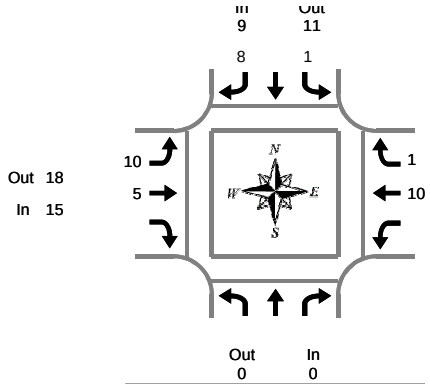
By Movement	Northbound SE Myra Rd				Southbound SE Myra Rd				Eastbound SR-125				Westbound SR-125				Total
				Total	L		R	Total	L	T		Total		T	R	Total	
Volume				0	54		273	327	169	467		636		608	43	651	1,614
%HV	NA	NA	NA	0.0%	1.9%	NA	2.9%	2.8%	5.9%	1.1%	NA	2.4%	NA	1.6%	2.3%	1.7%	2.2%
PHF				0.00	0.79		0.85	0.88	0.94	0.88		0.93		0.88	0.83	0.88	0.95

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE Myra Rd				Southbound SE Myra Rd				Eastbound SR-125				Westbound SR-125				Interval Total	Pedestrians Crosswalk			
				Bikes	L		R	Bikes	L	T		Bikes		T	R	Bikes		North	South	East	West
4:00 PM				0	44		283	0	151	471		0		550	42	0	1,541	0	0	0	0
4:15 PM				0	56		283	0	162	471		0		580	43	0	1,595	0	0	0	0
4:30 PM				0	54		273	0	169	467		0		608	43	0	1,614	0	0	0	0
4:45 PM				0	56		249	0	159	461		0		588	40	0	1,553	0	0	0	0
5:00 PM				0	53		244	0	158	417		0		604	41	0	1,517	0	0	0	0

Heavy Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



SE Myra Rd & SR-125

Thursday, February 26, 2015
4:00 PM to 6:00 PM

Peak Hour Summary
4:30 PM to 5:30 PM

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE Myra Rd				Southbound SE Myra Rd				Eastbound SR-125				Westbound SR-125				Interval Total
				Total	L		R	Total	L	T		Total		T	R	Total	
4:00 PM				0	0		3	3	5	1		6		1	0	1	10
4:15 PM				0	1		2	3	1	0		1		2	0	2	6
4:30 PM				0	0		2	2	5	0		5		2	0	2	9
4:45 PM				0	0		2	2	1	2		3		2	1	3	8
5:00 PM				0	1		3	4	1	2		3		2	0	2	9
5:15 PM				0	0		1	1	3	1		4		4	0	4	9
5:30 PM				0	0		0	0	0	2		2		2	0	2	4
5:45 PM				0	0		1	1	1	6		7		4	0	4	12
Total Survey				0	2		14	16	17	14		31		19	1	20	67

Heavy Vehicle Peak Hour Summary
4:30 PM to 5:30 PM

By Approach	Northbound SE Myra Rd			Southbound SE Myra Rd			Eastbound SR-125			Westbound SR-125			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	0	0	9	11	20	15	18	33	11	6	17	35
PHF	0.00			0.28			0.29			0.28			0.34

By Movement	Northbound SE Myra Rd				Southbound SE Myra Rd				Eastbound SR-125				Westbound SR-125				Total
				Total	L		R	Total	L	T		Total		T	R	Total	
Volume				0	1		8	9	10	5		15		10	1	11	35
PHF				0.00	0.25		0.29	0.28	0.23	0.14		0.29		0.25	0.25	0.28	0.34

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

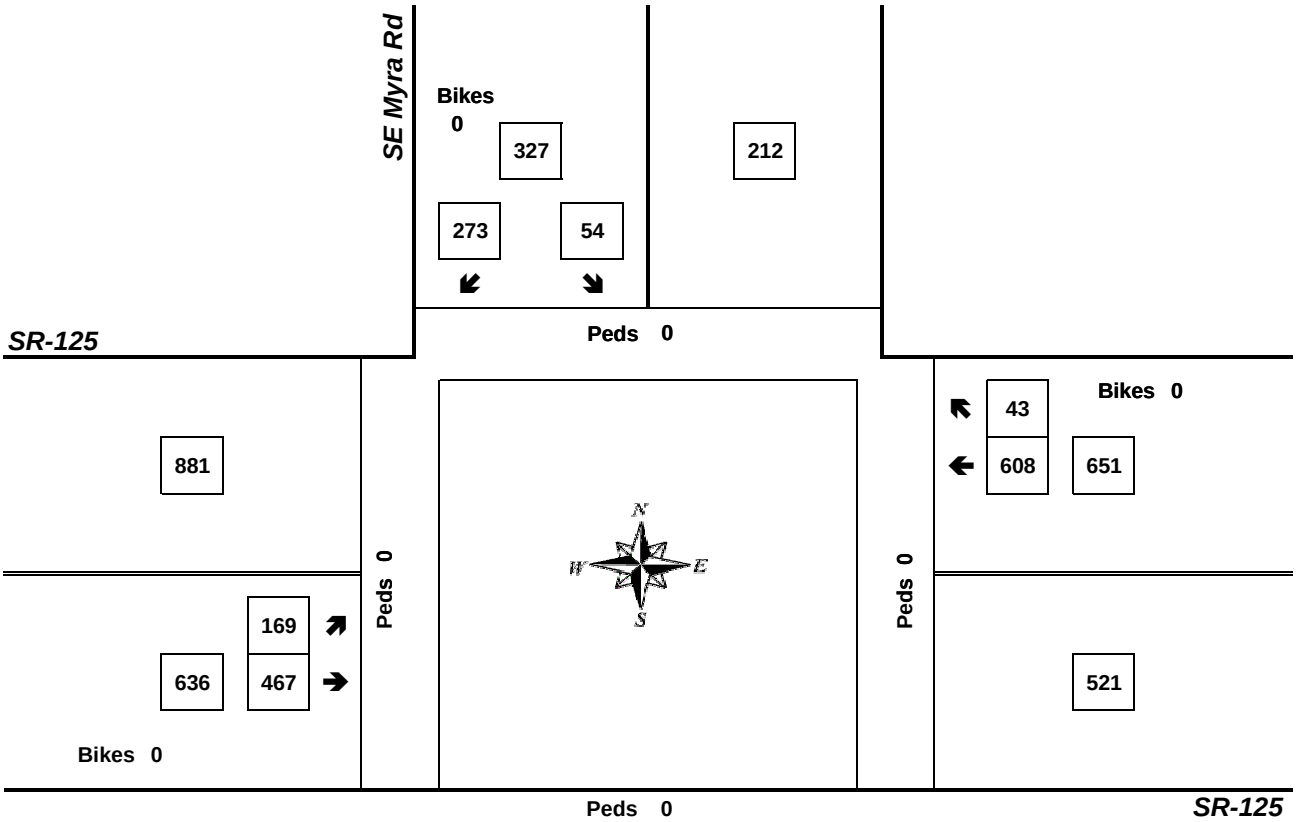
Interval Start Time	Northbound SE Myra Rd				Southbound SE Myra Rd				Eastbound SR-125				Westbound SR-125				Interval Total
				Total	L		R	Total	L	T		Total		T	R	Total	
4:00 PM				0	1		9	10	12	3		15		7	1	8	33
4:15 PM				0	2		9	11	8	4		12		8	1	9	32
4:30 PM				0	1		8	9	10	5		15		10	1	11	35
4:45 PM				0	1		6	7	5	7		12		10	1	11	30
5:00 PM				0	1		5	6	5	11		16		12	0	12	34

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

SE Myra Rd & SR-125

4:30 PM to 5:30 PM
Thursday, February 26, 2015



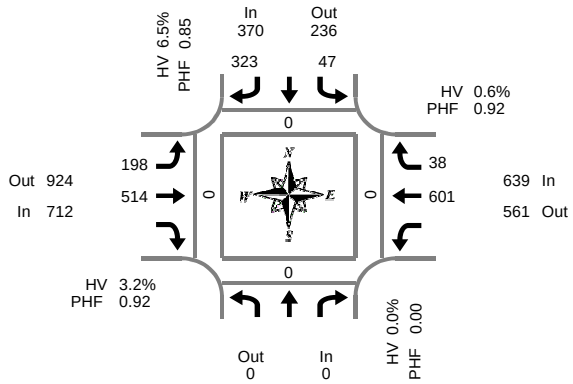
Bikes
0

Approach	PHF	HV%	Volume
EB	0.93	2.4%	636
WB	0.88	1.7%	651
NB	0.00	0.0%	0
SB	0.88	2.8%	327
Intersection	0.95	2.2%	1,614

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
4:00 PM to 5:00 PM

SE Myra Rd & Hwy 125

Tuesday, October 24, 2017
4:00 PM to 6:00 PM

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE Myra Rd				Southbound SE Myra Rd				Eastbound Hwy 125				Westbound Hwy 125				Interval Total	Pedestrians Crosswalk			
				Bikes	L		R	Bikes	L	T		Bikes		T	R	Bikes		North	South	East	West
4:00 PM				0	10		85	0	48	126		0		163	10	0	442	0	0	0	0
4:15 PM				0	22		87	0	49	120		0		135	12	0	425	0	0	0	0
4:30 PM				0	7		82	0	58	135		0		146	5	0	433	0	0	0	0
4:45 PM				0	8		69	0	43	133		0		157	11	0	421	0	0	0	0
5:00 PM				0	21		88	0	44	105		0		168	12	0	438	0	0	0	0
5:15 PM				0	8		72	0	40	99		0		163	7	0	389	0	0	0	0
5:30 PM				0	9		76	0	40	109		0		142	9	0	385	0	0	0	0
5:45 PM				0	16		63	0	46	80		0		144	3	0	352	0	0	0	0
Total Survey				0	101		622	0	368	907		0		1,218	69	0	3,285	0	0	0	0

Peak Hour Summary
4:00 PM to 5:00 PM

By Approach	Northbound SE Myra Rd				Southbound SE Myra Rd				Eastbound Hwy 125				Westbound Hwy 125				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	0	0	0	0	370	236	606	0	712	924	1,636	0	639	561	1,200	0	1,721	0	0	0	0
%HV	0.0%				6.5%				3.2%				0.6%				3.0%				
PHF	0.00				0.85				0.92				0.92				0.97				

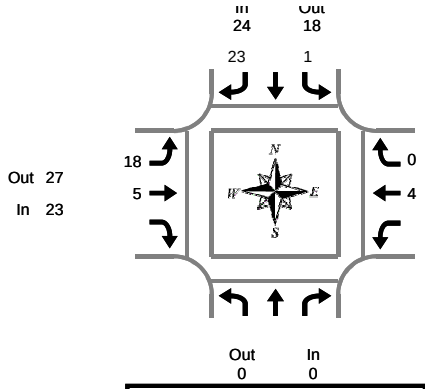
By Movement	Northbound SE Myra Rd				Southbound SE Myra Rd				Eastbound Hwy 125				Westbound Hwy 125				Total
				Total	L		R	Total	L	T		Total		T	R	Total	
Volume				0	47		323	370	198	514		712		601	38	639	1,721
%HV	NA	NA	NA	0.0%	2.1%	NA	7.1%	6.5%	9.1%	1.0%	NA	3.2%	NA	0.7%	0.0%	0.6%	3.0%
PHF				0.00	0.53		0.93	0.85	0.85	0.95		0.92		0.92	0.79	0.92	0.97

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE Myra Rd				Southbound SE Myra Rd				Eastbound Hwy 125				Westbound Hwy 125				Interval Total	Pedestrians Crosswalk			
				Bikes	L		R	Bikes	L	T		Bikes		T	R	Bikes		North	South	East	West
4:00 PM				0	47		323	0	198	514		0		601	38	0	1,721	0	0	0	0
4:15 PM				0	58		326	0	194	493		0		606	40	0	1,717	0	0	0	0
4:30 PM				0	44		311	0	185	472		0		634	35	0	1,681	0	0	0	0
4:45 PM				0	46		305	0	167	446		0		630	39	0	1,633	0	0	0	0
5:00 PM				0	54		299	0	170	393		0		617	31	0	1,564	0	0	0	0

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



Peak Hour Summary
4:00 PM to 5:00 PM

SE Myra Rd & Hwy 125

Tuesday, October 24, 2017
4:00 PM to 6:00 PM

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE Myra Rd				Southbound SE Myra Rd				Eastbound Hwy 125				Westbound Hwy 125				Interval Total
				Total	L		R	Total	L	T		Total		T	R	Total	
4:00 PM				0	0		7	7	4	1		5		0	0	0	12
4:15 PM				0	1		9	10	4	2		6		2	0	2	18
4:30 PM				0	0		2	2	6	1		7		0	0	0	9
4:45 PM				0	0		5	5	4	1		5		2	0	2	12
5:00 PM				0	0		3	3	3	0		3		2	0	2	8
5:15 PM				0	0		2	2	4	2		6		0	0	0	8
5:30 PM				0	0		5	5	2	0		2		3	0	3	10
5:45 PM				0	0		4	4	4	1		5		3	0	3	12
Total Survey				0	1		37	38	31	8		39		12	0	12	89

Heavy Vehicle Peak Hour Summary
4:00 PM to 5:00 PM

By Approach	Northbound SE Myra Rd			Southbound SE Myra Rd			Eastbound Hwy 125			Westbound Hwy 125			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	0	0	24	18	42	23	27	50	4	6	10	51
PHF	0.00			0.32			0.32			0.17			0.33

By Movement	Northbound SE Myra Rd				Southbound SE Myra Rd				Eastbound Hwy 125				Westbound Hwy 125				Total
				Total	L		R	Total	L	T		Total		T	R	Total	
Volume				0	1		23	24	18	5		23		4	0	4	51
PHF				0.00	0.25		0.32	0.32	0.32	0.31		0.32		0.17	0.00	0.17	0.33

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

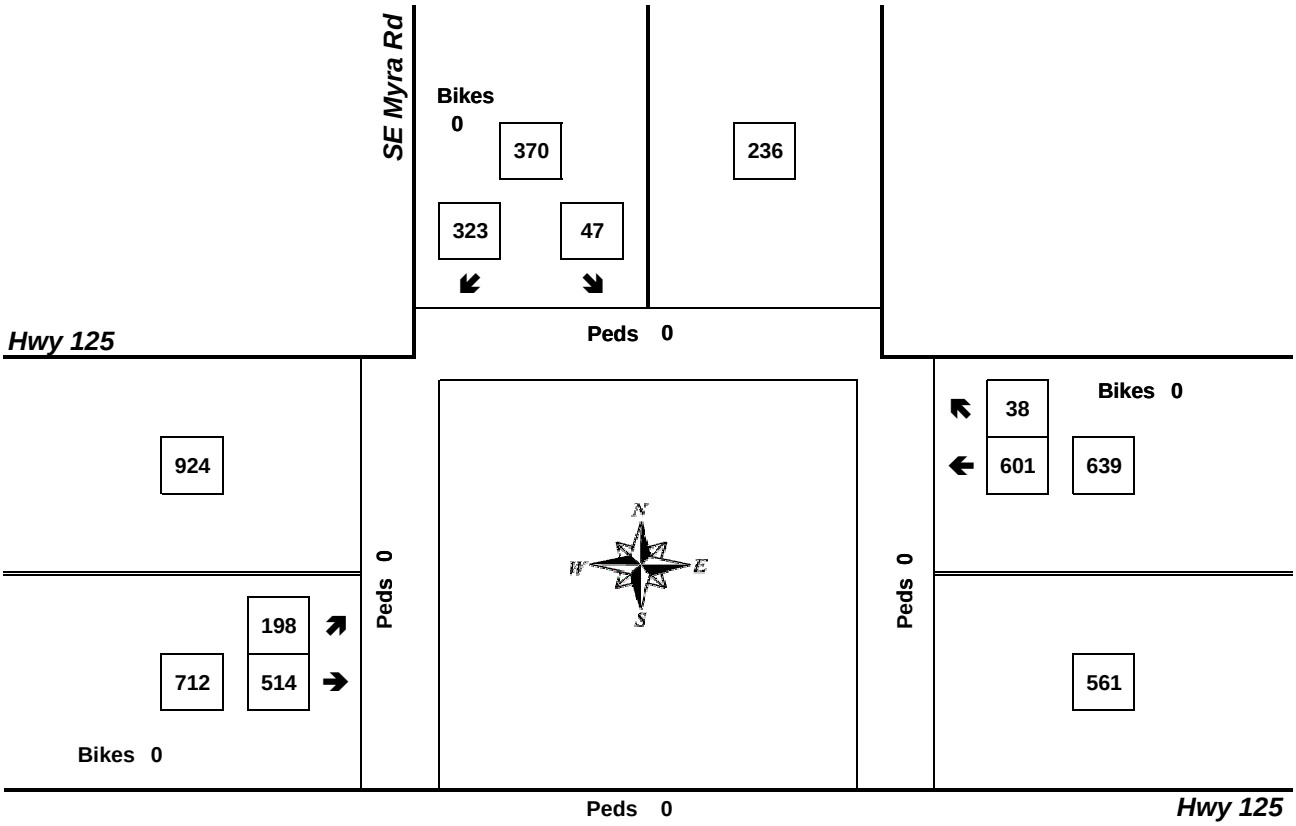
Interval Start Time	Northbound SE Myra Rd				Southbound SE Myra Rd				Eastbound Hwy 125				Westbound Hwy 125				Interval Total
				Total	L		R	Total	L	T		Total		T	R	Total	
4:00 PM				0	1		23	24	18	5		23		4	0	4	51
4:15 PM				0	1		19	20	17	4		21		6	0	6	47
4:30 PM				0	0		12	12	17	4		21		4	0	4	37
4:45 PM				0	0		15	15	13	3		16		7	0	7	38
5:00 PM				0	0		14	14	13	3		16		8	0	8	38

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

SE Myra Rd & Hwy 125

4:00 PM to 5:00 PM
Tuesday, October 24, 2017



Bikes
0

Approach	PHF	HV%	Volume
EB	0.92	3.2%	712
WB	0.92	0.6%	639
NB	0.00	0.0%	0
SB	0.85	6.5%	370
Intersection	0.97	3.0%	1,721

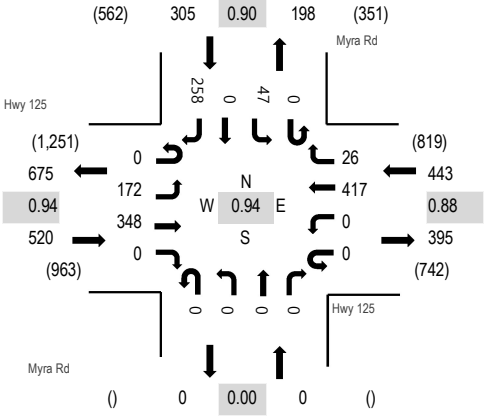
Count Period: 4:00 PM to 6:00 PM

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

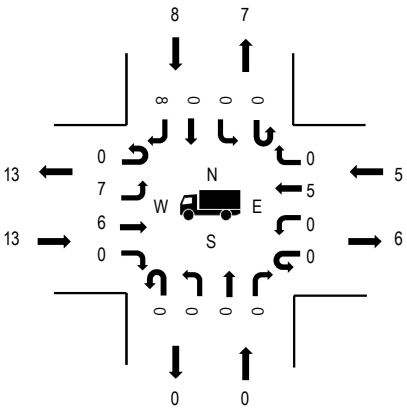
Location: Myra Rd & Hwy 125 PM
Date: Tuesday, March 31, 2020
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:35 PM - 04:50 PM

Peak Hour

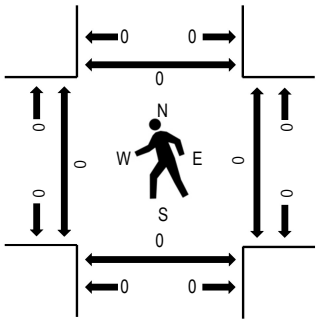
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	2.5%	0.94
WB	1.1%	0.88
NB	0.0%	0.00
SB	2.6%	0.90
All	2.1%	0.94

Traffic Counts - Motorized Vehicles

Interval Start Time	Hwy 125 Eastbound				Hwy 125 Westbound				Myra Rd Northbound				Myra Rd Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	18	28	0	0	0	27	1	0	0	0	0	0	1	0	22	97	1,267
4:05 PM	0	10	34	0	0	0	38	3	0	0	0	0	0	8	0	31	124	1,249
4:10 PM	0	17	26	0	0	0	36	1	0	0	0	0	0	1	0	17	98	1,247
4:15 PM	0	19	31	0	0	0	34	3	0	0	0	0	0	3	0	24	114	1,268
4:20 PM	0	14	26	0	0	0	32	2	0	0	0	0	0	2	0	19	95	1,243
4:25 PM	0	12	39	0	0	0	32	1	0	0	0	0	0	8	0	21	113	1,250
4:30 PM	0	14	21	0	0	0	28	2	0	0	0	0	0	4	0	18	87	1,235
4:35 PM	0	15	27	0	0	0	37	0	0	0	0	0	0	3	0	27	109	1,235
4:40 PM	0	15	25	0	0	0	36	2	0	0	0	0	0	3	0	22	103	1,226
4:45 PM	0	9	38	0	0	0	51	1	0	0	0	0	0	2	0	23	124	1,188
4:50 PM	0	19	35	0	0	0	27	4	0	0	0	0	0	2	0	21	108	1,125
4:55 PM	0	11	29	0	0	0	32	5	0	0	0	0	0	6	0	12	95	1,097
5:00 PM	0	13	20	0	0	0	23	2	0	0	0	0	0	4	0	17	79	1,077
5:05 PM	0	19	31	0	0	0	44	3	0	0	0	0	0	3	0	22	122	
5:10 PM	0	12	26	0	0	0	41	1	0	0	0	0	0	7	0	32	119	
5:15 PM	0	9	23	0	0	0	35	2	0	0	0	0	0	6	0	14	89	
5:20 PM	0	10	29	0	0	0	36	2	0	0	0	0	0	0	0	25	102	
5:25 PM	0	14	35	0	0	0	30	1	0	0	0	0	0	3	0	15	98	
5:30 PM	0	12	23	0	0	0	29	2	0	0	0	0	0	3	0	18	87	
5:35 PM	0	7	38	0	0	0	28	2	0	0	0	0	0	2	0	23	100	
5:40 PM	0	4	12	0	0	0	26	1	0	0	0	0	0	1	0	21	65	
5:45 PM	0	4	18	0	0	0	22	4	0	0	0	0	0	1	0	12	61	
5:50 PM	0	12	21	0	0	0	27	3	0	0	0	0	0	3	0	14	80	
5:55 PM	0	11	28	0	0	0	17	3	0	0	0	0	0	3	0	13	75	
Count Total	0	300	663	0	0	0	768	51	0	0	0	0	0	79	0	483	2,344	
Peak Hour	0	172	348	0	0	0	417	26	0	0	0	0	0	47	0	258	1,268	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	2	0	0	0	2	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	1	0	1	1	3	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	2	0	0	1	3	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	1	0	2	0	3	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	1	0	0	0	1	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	1	0	0	0	1	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	2	0	1	1	4	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	1	0	0	0	1	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	0	0	2	2	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	0	1	1	2	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	3	0	0	0	3	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	1	0	0	0	1	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	1	0	0	0	1	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	0	1	3	4	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	1	0	0	1	2	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	1	0	1	0	2	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	1	0	1	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	2	0	0	0	2	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	1	1	2	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	20	0	9	11	40	Count Total	0	0	0	0	0	Count Total	0	0	0	0	0
Peak Hour	13	0	5	8	26	Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	0	0

Growth Rate Calculations

PM

	Historical Volumes *With Data Date*				Historical Volumes *With Data Date*				Historical Volumes *With Data Date*			
Myra Road / Rose Street						34	287	29 Jan-14		34	316	34 Aug-17
					20			35	40			55
					128		1,230	170	122		1,353	186
					39			134	34			146
					5	42	220	92	5	48	253	85
						Jan-14 > Aug-17		3.54 yrs				
							2.7%					
Myra Road / C Street / Poplar Street		144	316	61 Jan-14		146	411	43 Nov-16		171	430	41 Dec-18
	78			69	92			51	107			68
	162		1,631	278	134		1,771	286	175		1,961	308
	21			140	19			128	28			156
	9	18	232	112	9	26	329	106	9	16	367	94
		Jan-14 > Nov-16		2.79 yrs		Nov-16 > Dec-18		2.11 yrs		Jan-14 > Dec-18		4.91 yrs
			3.0%				4.9%				3.8%	
Myra Road / 12th Street / The Dalles Military Road						131	278	70 Mar-11		158	324	95 Aug-17
					87			109	91			125
					167		1,263	207	150		1,358	164
					15			27	12			17
					11	13	147	12	11	20	190	12
						Mar-11 > Aug-17		6.38 yrs				
							1.1%					
Myra Road / SR 125		273		51 Mar-11		273		54 Feb-15		323		47 Oct-17
	151			38	169			43	198			38
	444		1,569	612	467		1,614	608	514		1,721	601
	12				12				12			
		Mar-11 > Feb-15		3.95 yrs		Feb-15 > Oct-17		2.66 yrs		Mar-11 > Oct-17		6.61 yrs
			0.7%				2.4%				1.4%	

Growth Rates	Average	Median
Overall:	2.5%	2.6%
Excluding Highest & Lowest:	2.4%	2.6%
Longest-Term Value per Intersection:	2.3%	2.1%

Estimating Present Volumes

AM

Historical Volumes (With Data Date)	Recent Volumes (With Data Date)	If Historical Volumes Had Grown at 2.5%	2020 Raw Volumes (unbalanced)	Approach Volumes (unbalanced)	Volume Balancing: Approach Adjustments	Volume Balancing: Movement Adjustments	2020 Present Volumes (balanced)
			Either grow historical volumes by 2.5%...				
		2.5%	*...OR increase recent data by 30%*				
Myra Road / Futura Road							
	2 191 0 Apr-20		3 248 0	251 268	49 27	49	3 297 0
0 / 0 / 1	0 / 0 / 1		0 / 0 / 1	20 / 1	2 / 0	0 / 0	0 / 0 / 1
n/a	413	n/a	537		156	78	615
3	3 13 206 0	3	3 17 268 0	3 249 285	3 **49** **29**	3 2 27 0	3 19 295 0
Myra Road / Rose Street							
24 210 45 Aug-17	Apr-20	26 224 48	26 224 48	298 314			26 224 48
46 / 141 / 49		49 / 151 / 52	49 / 151 / 52	117 / 252			49 / 151 / 52
1,002	n/a	1,071	1,071	FIXED	FIXED	FIXED	1,071
26 / 69 / 58		28 / 74 / 62	28 / 74 / 62	164 / 302			28 / 74 / 62
5 16 222 96	5	5 17 237 103	5 17 237 103	5 338 357	5	5	5 17 237 103
Offner Road / Rose Street							
	1 7 Apr-20		1 9	10 13	0 1	0	1 9
4 / 186	6 / 120		5 / 242	157 / 247	**7** / **55**	1 / 54	6 / 296
n/a	324	n/a	421		124	62	483
			8 / 156	164 / 251	7 / 54	7	8 / 163
6	6	6	6	6	6	6	6
Avery Street / Rose Street							
	4 2 1 Apr-20		5 3 1	9 16	0 2	0	5 3 1
3 / 153 / 9	6 / 122 / 15		4 / 199 / 12	180 / 215	-9 / **90**	2 / 83 / 5	6 / 282 / 17
n/a	340	n/a	444		162	81	525
			8 / 159 / 20	187 / 213	-8 / 83	-8	8 / 151 / 20
7	7 12 3 10	7	7 16 4 13	7 35 33	7 5 -1	7 -1	7 15 4 13

Estimating Present Volumes

PM

Avg	Med	
-29%	-29%	Overall
-28%	-29%	Excluding Highest & Lowest

Historical Volumes: *With Data Date* · Recent Volumes: *With Data Date* · If Historical Volumes Had Grown at 2.5%: 2.5%

2020 Raw Volumes (unbalanced): *Either grow historical volumes by 2.5%...* / *...OR increase recent data by 30%*

Approach Volumes (unbalanced) · Volume Balancing: *Approach Adjustments* · Volume Balancing: *Movement Adjustments* · 2020 Present Volumes (balanced)

1 – Myra Road / Heritage Road / Pine Street

Panel	Top	Date	Left	Center	Right	Bottom
Historical Volumes	90 265 44	Jan-14	65 / 45 / 19	959	65 / 52 / 56	5 205 48
Recent Volumes	59 218 36	Mar-20	29 / 28 / 10	843	52 / 44 / 73	13 231 50
If Historical Volumes Had Grown at 2.5%	105 309 51		76 / 52 / 22	1,118	76 / 61 / 65	6 239 56
Avg				-25%		
2020 Raw Volumes (unbalanced)	105 309 51		76 / 52 / 22	1,118	76 / 61 / 65	6 239 56
Approach Volumes (unbalanced)	465 391		172 / 150		202 / 159	396 301
Volume Balancing: Approach Adjustments	6 63		2 / 1	176	1 / 15	8 80
Volume Balancing: Movement Adjustments	6		1	88	1	2 63 15
2020 Present Volumes (balanced)	105 315 51		76 / 52 / 23	1,206	76 / 61 / 66	8 302 71

2 – N 9th Avenue / N 9th Court / Pine Street

Panel	Top	Date	Left	Center	Right	Bottom
Historical Volumes	3 3 2	Nov-16	4 / 157 / 127	701	0 / 117 / 66	129 2 91
Recent Volumes		Apr-20		n/a		
If Historical Volumes Had Grown at 2.5%	3 3 2		4 / 171 / 138	761	0 / 127 / 72	140 2 99
2020 Raw Volumes (unbalanced)	3 3 2		4 / 171 / 138	761	0 / 127 / 72	140 2 99
Approach Volumes (unbalanced)	8 6		270 / 313		199 / 272	213 241
Volume Balancing: Approach Adjustments				No VB		
Volume Balancing: Movement Adjustments				No VB		
2020 Present Volumes (balanced)	3 3 2		4 / 171 / 138	761	0 / 127 / 72	140 2 99

3 – Myra Road / Futura Road

Panel	Top	Date	Left	Center	Right	Bottom
Historical Volumes				n/a		
Recent Volumes	0 356 0	Apr-20	7 / 0 / 5	665	0 / 0 / 0	0 297 0
If Historical Volumes Had Grown at 2.5%				n/a		
2020 Raw Volumes (unbalanced)	0 463 0		9 / 0 / 7	865	0 / 0 / 0	0 386 0
Approach Volumes (unbalanced)	463 395		0 / 16		0 / 0	470 386
Volume Balancing: Approach Adjustments	-59 -14		0 / -1	-148	0 / 0	-60 -14
Volume Balancing: Movement Adjustments	-59		-1	-74	0	0 -14 0
2020 Present Volumes (balanced)	0 404 0		9 / 0 / 6	791	0 / 0 / 0	0 372 0

4 – Wallula Avenue / Lambert Avenue / Rose Street

Panel	Top	Date	Left	Center	Right	Bottom
Historical Volumes				n/a		
Recent Volumes	1 6 34	Mar-20	0 / 90 / 0	342	65 / 112 / 28	0 5 1
If Historical Volumes Had Grown at 2.5%				n/a		
2020 Raw Volumes (unbalanced)	1 8 44		0 / 117 / 0	445	85 / 146 / 36	0 7 1
Approach Volumes (unbalanced)	53 92		147 / 117		267 / 162	44 8
Volume Balancing: Approach Adjustments	13 6		10 / 34	132	**19** / **47**	3 0
Volume Balancing: Movement Adjustments	13		34	66	6 / 10 / 3	0
2020 Present Volumes (balanced)	1 8 57		0 / 151 / 0	511	91 / 156 / 39	0 7 1

5 – Myra Road / Rose Street

Panel	Top	Date	Left	Center	Right	Bottom
Historical Volumes	34 316 34	Aug-17	40 / 122 / 34	1,353	55 / 186 / 146	48 253 85
Recent Volumes	35 236 27	Mar-20	21 / 90 / 17	1,086	45 / 134 / 130	36 237 78
If Historical Volumes Had Grown at 2.5%	36 338 36		43 / 130 / 36	1,445	59 / 199 / 156	51 270 91
Avg				-25%		
2020 Raw Volumes (unbalanced)	36 338 36		43 / 130 / 36	1,445	59 / 199 / 156	51 270 91
Approach Volumes (unbalanced)	410 372		286 / 209	FIXED	414 / 257	530 412
Volume Balancing: Approach Adjustments				FIXED		
Volume Balancing: Movement Adjustments				FIXED		
2020 Present Volumes (balanced)	36 338 36		43 / 130 / 36	1,445	59 / 199 / 156	51 270 91

6 – Offner Road / Rose Street

Panel	Top	Date	Left	Center	Right	Bottom
Historical Volumes				n/a		
Recent Volumes	5 12	Apr-20	4 / 219	555	9 / 306	
If Historical Volumes Had Grown at 2.5%				n/a		
2020 Raw Volumes (unbalanced)	7 16		5 / 285	723	12 / 398	
Approach Volumes (unbalanced)	23 17		405 / 290		410 / 301	
Volume Balancing: Approach Adjustments	0 -1		**9** / **-33**	-48	9 / -32	
Volume Balancing: Movement Adjustments	0		-1 / -32	-24	9	
2020 Present Volumes (balanced)	7 16		4 / 253	699	12 / 407	

7 – Avery Street / Rose Street

Panel	Top	Date	Left	Center	Right	Bottom
Historical Volumes				n/a		
Recent Volumes	3 2 4	Apr-20	3 / 185 / 9	570	7 / 287 / 12	32 0 26
If Historical Volumes Had Grown at 2.5%				n/a		
2020 Raw Volumes (unbalanced)	4 3 5		4 / 241 / 12	743	9 / 373 / 16	42 0 34
Approach Volumes (unbalanced)	12 13		419 / 257		398 / 280	31 76
Volume Balancing: Approach Adjustments	0 0		**0** / **12**	24	0 / 11	1 0
Volume Balancing: Movement Adjustments	0		0 / 11 / 1	12	0	0
2020 Present Volumes (balanced)	4 3 5		4 / 252 / 13	755	9 / 373 / 16	42 0 34

8 – N 9th Avenue / Rose Street

Panel	Top	Date	Left	Center	Right	Bottom
Historical Volumes	117 187 21	Feb-15	73 / 196 / 137	1,374	16 / 211 / 26	135 222 33
Recent Volumes	18 213 21	Mar-20	25 / 137 / 89	1,103	20 / 132 / 89	75 184 100
If Historical Volumes Had Grown at 2.5%	133 212 24		83 / 222 / 155	1,557	18 / 239 / 29	153 252 37
Avg				-29%		
2020 Raw Volumes (unbalanced)	133 212 24		83 / 222 / 155	1,557	18 / 239 / 29	153 252 37
Approach Volumes (unbalanced)	369 353		525 / 460		286 / 283	396 442
Volume Balancing: Approach Adjustments				No VB		
Volume Balancing: Movement Adjustments				No VB		
2020 Present Volumes (balanced)	133 212 24		83 / 222 / 155	1,557	18 / 239 / 29	153 252 37

9 – Myra Road / C Street / Poplar Street

Panel	Top	Date	Left	Center	Right	Bottom
Historical Volumes	146 411 43	Nov-16	92 / 134 / 19	1,771	51 / 286 / 128	26 329 106
Recent Volumes	113 264 26	Mar-20	79 / 97 / 32	1,273	47 / 200 / 107	25 221 62
If Historical Volumes Had Grown at 2.5%	159 447 47		100 / 146 / 21	1,926	55 / 311 / 139	28 358 115
Avg				-34%		
2020 Raw Volumes (unbalanced)	159 447 47		100 / 146 / 21	1,926	55 / 311 / 139	28 358 115
Approach Volumes (unbalanced)	653 513		498 / 267		505 / 308	607 501
Volume Balancing: Approach Adjustments	**-62** **-51**		-15 / -10	-226	-5 / -5	-42 -36
Volume Balancing: Movement Adjustments	-15 -42 -5		-10	-113	-5	-36
2020 Present Volumes (balanced)	144 405 42		90 / 146 / 21	1,813	50 / 311 / 139	28 322 115

10 – Myra Road / Whitman Drive

Panel	Top	Date	Left	Center	Right	Bottom
Historical Volumes	14 541	Aug-17	27 / 52	1,072		65 373
Recent Volumes		Apr-20		n/a		
If Historical Volumes Had Grown at 2.5%	15 578		29 / 56	1,145		69 398
2020 Raw Volumes (unbalanced)	15 578		29 / 56	1,145		69 398
Approach Volumes (unbalanced)	593 427		84 / 85			634 467
Volume Balancing: Approach Adjustments	**-28** **38**		-1 / 3	20		-27 35
Volume Balancing: Movement Adjustments	-1 -27		3	10		35
2020 Present Volumes (balanced)	14 551		32 / 56	1,155		69 433

11 – Myra Road / 12th Street / The Dalles Military Road

Panel	Top	Date	Left	Center	Right	Bottom
Historical Volumes	158 324 95	Aug-17	91 / 150 / 12	1,358	125 / 164 / 17	20 190 12
Recent Volumes		Apr-20		n/a		
If Historical Volumes Had Grown at 2.5%	169 346 101		97 / 160 / 13	1,450	134 / 175 / 18	21 203 13
2020 Raw Volumes (unbalanced)	169 346 101		97 / 160 / 13	1,450	134 / 175 / 18	21 203 13
Approach Volumes (unbalanced)	616 434		365 / 270		327 / 274	377 237
Volume Balancing: Approach Adjustments	**-9** **68**		-2 / 15	118	21 / -2	-5 32
Volume Balancing: Movement Adjustments	-2 -5 -2		15	59	21	32
2020 Present Volumes (balanced)	167 341 99		112 / 160 / 13	1,509	155 / 175 / 18	21 235 13

12 – Myra Road / SR 125

Panel	Top	Date	Left	Center	Right	Bottom
Historical Volumes	323 47	Oct-17	198 / 514	1,721	38 / 601	
Recent Volumes	258 47	Mar-20	172 / 348	1,268	26 / 417	
If Historical Volumes Had Grown at 2.5%	343 50		210 / 546	1,827	40 / 638	
Avg				-31%		
2020 Raw Volumes (unbalanced)	343 50		210 / 546	1,827	40 / 638	
Approach Volumes (unbalanced)	393 250		981 / 756		678 / 596	
Volume Balancing: Approach Adjustments	**-21** **19**		-18 / 16	-4	3 / -3	
Volume Balancing: Movement Adjustments	-18 -3		16	-2	3	
2020 Present Volumes (balanced)	325 47		226 / 546	1,825	43 / 638	

Appendix B
Trip Generation Calculations

Detailed Land Use Data

For 215 Dwelling Units of 215 lots SFR

(210) Single-Family Detached Housing

Open Date: 11/5/2020

Project: Konen`s Myra Road Site

Analysis Date: 11/5/2020

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	2103	0	9.44	4.81	19.39	2.1	264	50	50	True	Ln(T) = 0.92 Ln(X) + 2.71	0.95
Source : Trip Generation Manual 10th Edition												
Weekday AM Peak Hour of Adjacent Street Traffic	157	0	0.74	0.33	2.27	0.27	219	25	75	True	T = 0.71(X) + 4.8	0.89
Source : Trip Generation Manual 10th Edition												
Weekday PM Peak Hour of Adjacent Street Traffic	212	0	0.99	0.44	2.98	0.31	242	63	37	True	Ln(T) = 0.96 Ln(X) + 0.2	0.92
Source : Trip Generation Manual 10th Edition												

Detailed Land Use Data

For 2.9 Storage Units (100s) of RV/Boat Storage

(151) Mini-Warehouse

Open Date: 11/5/2020

Project: Konen`s Myra Road Site

Analysis Date: 11/5/2020

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	52	0	17.96	12.25	33.33	4.13	5	50	50	False	T = 18.86(X) - 4.09	0.96
Source : Trip Generation Manual 10th Edition												
Weekday AM Peak Hour of Adjacent Street Traffic	4	0	1.39	0.81	1.7	0.33	6	51	49	False	T = 1.98(X) - 3.79	0.98
Source : Trip Generation Manual 10th Edition												
Weekday PM Peak Hour of Adjacent Street Traffic	6	0	1.95	0.92	8.33	1.4	5	50	50	True	T = 1.52(X) + 2.02	0.61
Source : Trip Generation Manual 10th Edition												

Detailed Land Use Data

For 8 Vehicle Fueling Positions of Super C-Store+Gas

(960) Super Convenience Market/Gas Station

Open Date: 11/5/2020

Project: Konen`s Myra Road Site

Analysis Date: 11/5/2020

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	1844	1088	230.52	125.67	355.6	71.75	14	50	50	False		
Source : Trip Generation Manual 10th Edition												
Weekday AM Peak Hour of Adjacent Street Traffic	225	140	28.08	5.4	49.31	11.98	14	50	50	False		
Source : Trip Generation Manual 10th Edition												
Weekday PM Peak Hour of Adjacent Street Traffic	184	103	22.96	8.75	44.83	8.34	14	50	50	False		
Source : Trip Generation Manual 10th Edition												

Detailed Land Use Data

For 4.2 1000 Sq. Ft. GLA of General Commercial

(820) Shopping Center

Open Date: 11/5/2020

Project: Konen`s Myra Road Site

Analysis Date: 11/5/2020

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	696	209	37.75	7.42	207.98	16.41	453	50	50	True	Ln(T) = 0.68 Ln(X) + 5.57	0.76
Source : Trip Generation Manual 10th Edition												
Weekday AM Peak Hour of Adjacent Street Traffic	154	26	0.94	0.18	23.74	0.87	351	62	38	True	T = 0.5(X) + 151.78	0.5
Source : Trip Generation Manual 10th Edition												
Weekday PM Peak Hour of Adjacent Street Traffic	52	18	3.81	0.74	18.69	2.04	327	48	52	True	Ln(T) = 0.74 Ln(X) + 2.89	0.82
Source : Trip Generation Manual 10th Edition												

Detailed Land Use Data

For 1.85 1000 Sq. Ft. GFA of Coffee Shop With Drive-Through

(937) Coffee/Donut Shop with Drive-Through Window

Open Date: 11/5/2020

Project: Konen`s Myra Road Site

Analysis Date: 11/5/2020

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	1518	744	820.38	738.66	869		2	50	50	False		
Source : Trip Generation Manual 10th Edition												
Weekday AM Peak Hour of Adjacent Street Traffic	165	81	88.99	18.32	353.57	48.19	2	51	49	False		
Source : Trip Generation Manual 10th Edition												
Weekday PM Peak Hour of Adjacent Street Traffic	80	40	43.38	2.09	92.31	18.88	2	50	50	False		
Source : Trip Generation Manual 10th Edition												

Detailed Land Use Data

For 100 Dwelling Units of 100 DU MFR

(221) Multifamily Housing (Mid-Rise)

Open Date: 11/5/2020

Project: Konen`s Myra Road Site

Analysis Date: 11/5/2020

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	543	0	5.44	1.27	12.5	2.03	205	50	50	True	T = 5.45(X) - 1.75	0.77
Source : Trip Generation Manual 10th Edition												
Weekday AM Peak Hour of Adjacent Street Traffic	34	0	0.36	0.06	1.61	0.19	207	26	74	True	Ln(T) = 0.98 Ln(X) - 0.98	0.67
Source : Trip Generation Manual 10th Edition												
Weekday PM Peak Hour of Adjacent Street Traffic	44	0	0.44	0.15	1.11	0.19	208	61	39	True	Ln(T) = 0.96 Ln(X) - 0.63	0.72
Source : Trip Generation Manual 10th Edition												

Trip Generation Summary

Alternative: Alternative 1
Phase:
Project: Konen`s Myra Road Site

Open Date: 11/5/2020
Analysis Date: 11/5/2020

ITE	Land Use		Weekday Average Daily Trips *	Enter	Exit	Total	Weekday AM Peak Hour of Adjacent Street Traffic *	Enter	Exit	Total	Weekday PM Peak Hour of Adjacent Street Traffic *	Enter	Exit	Total
151	RV/Boat Storage			26	26	52		2	2	4		3	3	6
	2.9	Storage Units (100s)												
210	215 lots SFR			1052	1051	2103		39	118	157		134	78	212
	215	Dwelling Units												
221	100 DU MFR			272	271	543		9	25	34		27	17	44
	100	Dwelling Units												
820	General Commercial			348	348	696		95	59	154		25	27	52
	4.2	1000 Sq. Ft. GLA												
937	Coffee Shop With Drive-Through			759	759	1518		84	81	165		40	40	80
	1.85	1000 Sq. Ft. GFA												
960	Super C-Store+Gas			922	922	1844		113	112	225		92	92	184
	8	Vehicle Fueling Positions												
Unadjusted Volume				3379	3377	6756		342	397	739		321	257	578
Internal Capture Trips				0	0	0		37	37	74		43	43	86
Pass-By Trips				1020	1020	2040		114	114	228		68	68	136
Volume Added to Adjacent Streets				2359	2357	4716		191	246	437		210	146	356

Total Weekday Average Daily Trips Internal Capture = 0 Percent
Total Weekday AM Peak Hour of Adjacent Street Traffic Internal Capture = 10 Percent
Total Weekday PM Peak Hour of Adjacent Street Traffic Internal Capture = 15 Percent

* - Custom rate used for selected time period.

Source: Institute of Transportation Engineers, Trip Generation Manual 10th Edition

Appendix C
Level of Service Reports

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	1	0	0	0	19	295	0	0	297	3
Future Vol, veh/h	0	0	1	0	0	0	19	295	0	0	297	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	135	-	-	-	-	-	150	-	-	140	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2	15	4	0	2	8	2
Mvmt Flow	0	0	1	0	0	0	23	351	0	0	354	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	578	753	179	574	755	176	358	0	0	351	0	0
Stage 1	356	356	-	397	397	-	-	-	-	-	-	-
Stage 2	222	397	-	177	358	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.4	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.35	-	-	2.22	-	-
Pot Cap-1 Maneuver	399	337	833	402	336	837	1109	-	-	1204	-	-
Stage 1	634	628	-	600	602	-	-	-	-	-	-	-
Stage 2	760	602	-	808	626	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	393	330	833	395	329	837	1109	-	-	1204	-	-
Mov Cap-2 Maneuver	393	330	-	395	329	-	-	-	-	-	-	-
Stage 1	621	628	-	587	589	-	-	-	-	-	-	-
Stage 2	744	589	-	807	626	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	0	0.5	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1109	-	-	-	833	-	1204	-	-
HCM Lane V/C Ratio	0.02	-	-	-	0.001	-	-	-	-
HCM Control Delay (s)	8.3	-	-	0	9.3	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	296	163	8	9	1
Future Vol, veh/h	6	296	163	8	9	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	3	2	2	2
Mvmt Flow	8	395	217	11	12	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	228	0	-	0	437	114
Stage 1	-	-	-	-	223	-
Stage 2	-	-	-	-	214	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1337	-	-	-	548	917
Stage 1	-	-	-	-	793	-
Stage 2	-	-	-	-	801	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1337	-	-	-	544	917
Mov Cap-2 Maneuver	-	-	-	-	544	-
Stage 1	-	-	-	-	787	-
Stage 2	-	-	-	-	801	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	11.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1337	-	-	-	567
HCM Lane V/C Ratio	0.006	-	-	-	0.024
HCM Control Delay (s)	7.7	0	-	-	11.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	282	17	20	151	8	15	4	13	1	3	5
Future Vol, veh/h	6	282	17	20	151	8	15	4	13	1	3	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	4	2	2	2	10	2	2	2
Mvmt Flow	7	348	21	25	186	10	19	5	16	1	4	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	196	0	0	369	0	0	518	619	185	432	624	98
Stage 1	-	-	-	-	-	-	373	373	-	241	241	-
Stage 2	-	-	-	-	-	-	145	246	-	191	383	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	7.1	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.4	3.52	4.02	3.32
Pot Cap-1 Maneuver	1374	-	-	1186	-	-	440	403	801	507	400	939
Stage 1	-	-	-	-	-	-	620	617	-	741	705	-
Stage 2	-	-	-	-	-	-	843	701	-	792	610	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1374	-	-	1186	-	-	424	391	801	481	388	939
Mov Cap-2 Maneuver	-	-	-	-	-	-	424	391	-	481	388	-
Stage 1	-	-	-	-	-	-	616	613	-	737	688	-
Stage 2	-	-	-	-	-	-	813	684	-	765	606	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	1	12.5	11.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	517	1374	-	-	1186	-	-	595
HCM Lane V/C Ratio	0.076	0.005	-	-	0.021	-	-	0.019
HCM Control Delay (s)	12.5	7.6	0	-	8.1	0.1	-	11.2
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.1

MOVEMENT SUMMARY

Site: 1 [PM 2020 Baseline]

Myra Road / Heritage Road / Pine Street Intersection
Site Category: Roundabout Intersection
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Myra Road												
3	L2	9	2.0	0.161	9.6	LOS A	0.9	22.1	0.38	0.37	0.38	35.7
8	T1	355	4.0	0.161	3.0	LOS A	0.9	22.8	0.37	0.37	0.37	33.9
18	R2	84	2.0	0.161	3.6	LOS A	0.9	22.8	0.36	0.37	0.36	30.8
Approach		448	3.6	0.161	3.3	LOS A	0.9	22.8	0.37	0.37	0.37	33.3
East: Pine Street												
1	L2	78	2.0	0.222	8.4	LOS A	0.9	21.8	0.42	0.50	0.42	31.6
6	T1	72	2.0	0.222	2.2	LOS A	0.9	21.8	0.42	0.50	0.42	32.4
16	R2	89	2.0	0.222	3.0	LOS A	0.9	21.8	0.42	0.50	0.42	30.2
Approach		239	2.0	0.222	4.5	LOS A	0.9	21.8	0.42	0.50	0.42	31.3
North: Myra Road												
7	L2	60	2.0	0.191	9.4	LOS A	1.1	27.1	0.34	0.42	0.34	32.2
4	T1	371	2.0	0.191	2.8	LOS A	1.1	28.0	0.33	0.39	0.33	33.8
14	R2	124	2.0	0.191	3.4	LOS A	1.1	28.0	0.32	0.36	0.32	34.4
Approach		554	2.0	0.191	3.7	LOS A	1.1	28.0	0.33	0.38	0.33	33.8
West: Heritage Road												
5	L2	89	2.0	0.168	11.4	LOS B	0.6	15.9	0.42	0.64	0.42	34.7
2	T1	61	2.0	0.168	4.7	LOS A	0.6	15.9	0.42	0.64	0.42	32.1
12	R2	27	2.0	0.168	4.9	LOS A	0.6	15.9	0.42	0.64	0.42	33.1
Approach		178	2.0	0.168	8.1	LOS A	0.6	15.9	0.42	0.64	0.42	33.5
All Vehicles		1419	2.5	0.222	4.2	LOS A	1.1	28.0	0.37	0.43	0.37	33.2

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	171	138	72	127	0	140	2	99	2	3	3
Future Vol, veh/h	4	171	138	72	127	0	140	2	99	2	3	3
Conflicting Peds, #/hr	7	0	0	0	0	7	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	4	3	7	2	6	2	4	2	2	2
Mvmt Flow	4	188	152	79	140	0	154	2	109	2	3	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	147	0	0	340	0	0	574	577	265	634	653	148
Stage 1	-	-	-	-	-	-	272	272	-	305	305	-
Stage 2	-	-	-	-	-	-	302	305	-	329	348	-
Critical Hdwy	4.12	-	-	4.13	-	-	7.16	6.52	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.16	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.16	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.554	4.018	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1435	-	-	1214	-	-	424	427	769	392	387	899
Stage 1	-	-	-	-	-	-	725	685	-	705	662	-
Stage 2	-	-	-	-	-	-	699	662	-	684	634	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1425	-	-	1214	-	-	395	392	768	314	356	892
Mov Cap-2 Maneuver	-	-	-	-	-	-	395	392	-	314	356	-
Stage 1	-	-	-	-	-	-	722	682	-	697	610	-
Stage 2	-	-	-	-	-	-	643	610	-	582	631	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	3	20.5	13.3
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	493	1425	-	-	1214	-	-	441
HCM Lane V/C Ratio	0.537	0.003	-	-	0.065	-	-	0.02
HCM Control Delay (s)	20.5	7.5	0	-	8.2	0	-	13.3
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	3.1	0	-	-	0.2	-	-	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	0	6	0	0	0	0	372	0	0	404	0
Future Vol, veh/h	9	0	6	0	0	0	0	372	0	0	404	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	135	-	-	-	-	-	150	-	-	140	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	3	2	2	2	2
Mvmt Flow	10	0	7	0	0	0	0	404	0	0	439	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	641	843	220	624	843	202	439	0	0	404	0	0
Stage 1	439	439	-	404	404	-	-	-	-	-	-	-
Stage 2	202	404	-	220	439	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	360	299	784	370	299	805	1117	-	-	1151	-	-
Stage 1	567	576	-	594	598	-	-	-	-	-	-	-
Stage 2	781	598	-	762	576	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	360	299	784	367	299	805	1117	-	-	1151	-	-
Mov Cap-2 Maneuver	360	299	-	367	299	-	-	-	-	-	-	-
Stage 1	567	576	-	594	598	-	-	-	-	-	-	-
Stage 2	781	598	-	756	576	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1117	-	-	360	784	-	1151	-	-
HCM Lane V/C Ratio	-	-	-	0.027	0.008	-	-	-	-
HCM Control Delay (s)	0	-	-	15.3	9.6	0	0	-	-
HCM Lane LOS	A	-	-	C	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	-	0	-	-

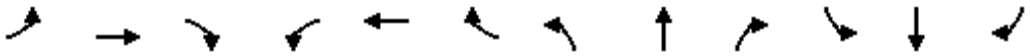
Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	151	0	39	156	91	0	7	1	57	8	1
Future Vol, veh/h	0	151	0	39	156	91	0	7	1	57	8	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	95	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	6	2	2
Mvmt Flow	0	164	0	42	170	99	0	8	1	62	9	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	269	0	0	164	0	0	473	517	164	473	468	220
Stage 1	-	-	-	-	-	-	164	164	-	304	304	-
Stage 2	-	-	-	-	-	-	309	353	-	169	164	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.16	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.16	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.16	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.554	4.018	3.318
Pot Cap-1 Maneuver	1295	-	-	1414	-	-	501	462	881	495	493	820
Stage 1	-	-	-	-	-	-	838	762	-	697	663	-
Stage 2	-	-	-	-	-	-	701	631	-	824	762	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1295	-	-	1414	-	-	482	448	881	477	478	820
Mov Cap-2 Maneuver	-	-	-	-	-	-	482	448	-	477	478	-
Stage 1	-	-	-	-	-	-	838	762	-	697	643	-
Stage 2	-	-	-	-	-	-	670	612	-	815	762	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1	12.7	13.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	477	1295	-	-	1414	-	-	480
HCM Lane V/C Ratio	0.018	-	-	-	0.03	-	-	0.149
HCM Control Delay (s)	12.7	0	-	-	7.6	-	-	13.8
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0.5



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	130	36	156	199	59	51	270	91	36	338	36
Future Volume (veh/h)	43	130	36	156	199	59	51	270	91	36	338	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1856	1856	1870	1856	1870	1870	1856	1870	1722	1870	1870
Adj Flow Rate, veh/h	46	138	0	166	212	0	54	287	97	38	360	38
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	5	3	3	2	3	2	2	3	2	12	2	2
Cap, veh/h	154	604		274	833		175	786	260	128	971	102
Arrive On Green	0.09	0.17	0.00	0.15	0.24	0.00	0.10	0.30	0.30	0.08	0.30	0.30
Sat Flow, veh/h	1739	3526	1572	1781	3526	1585	1781	2591	855	1640	3244	340
Grp Volume(v), veh/h	46	138	0	166	212	0	54	193	191	38	196	202
Grp Sat Flow(s),veh/h/ln	1739	1763	1572	1781	1763	1585	1781	1763	1684	1640	1777	1808
Q Serve(g_s), s	1.5	2.1	0.0	5.3	3.0	0.0	1.7	5.2	5.5	1.3	5.3	5.4
Cycle Q Clear(g_c), s	1.5	2.1	0.0	5.3	3.0	0.0	1.7	5.2	5.5	1.3	5.3	5.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.51	1.00		0.19
Lane Grp Cap(c), veh/h	154	604		274	833		175	535	511	128	532	541
V/C Ratio(X)	0.30	0.23		0.61	0.25		0.31	0.36	0.37	0.30	0.37	0.37
Avail Cap(c_a), veh/h	426	1151		436	1151		436	1439	1375	402	1451	1476
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.1	21.9	0.0	24.2	19.0	0.0	25.7	16.7	16.8	26.7	16.9	16.9
Incr Delay (d2), s/veh	0.4	0.1	0.0	0.8	0.1	0.0	0.4	1.5	1.6	0.5	1.5	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.8	0.0	2.1	1.1	0.0	0.7	2.1	2.1	0.5	2.2	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.5	22.0	0.0	25.0	19.1	0.0	26.1	18.2	18.4	27.1	18.4	18.5
LnGrp LOS	C	C		C	B		C	B	B	C	B	B
Approach Vol, veh/h		184	A		378	A		438			436	
Approach Delay, s/veh		23.1			21.7			19.2			19.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	23.6	13.4	14.5	10.0	23.3	9.4	18.5
Change Period (Y+Rc), s	5.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	50.0	15.0	20.0	15.0	50.0	15.0	20.0
Max Q Clear Time (g_c+I1), s	3.3	7.5	7.3	4.1	3.7	7.4	3.5	5.0
Green Ext Time (p_c), s	0.0	6.4	0.1	0.5	0.0	6.6	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	253	407	12	16	7
Future Vol, veh/h	4	253	407	12	16	7
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	284	457	13	18	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	470	0	-	0	614	236
Stage 1	-	-	-	-	464	-
Stage 2	-	-	-	-	150	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1088	-	-	-	424	766
Stage 1	-	-	-	-	599	-
Stage 2	-	-	-	-	862	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1088	-	-	-	422	765
Mov Cap-2 Maneuver	-	-	-	-	422	-
Stage 1	-	-	-	-	597	-
Stage 2	-	-	-	-	862	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	12.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1088	-	-	-	489
HCM Lane V/C Ratio	0.004	-	-	-	0.053
HCM Control Delay (s)	8.3	0	-	-	12.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

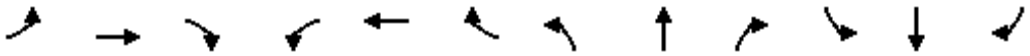
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	252	13	16	373	9	42	0	34	5	3	4
Future Vol, veh/h	4	252	13	16	373	9	42	0	34	5	3	4
Conflicting Peds, #/hr	3	0	5	5	0	3	6	0	3	3	0	6
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	286	15	18	424	10	48	0	39	6	3	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	437	0	0	306	0	0	565	782	159	624	784	226
Stage 1	-	-	-	-	-	-	309	309	-	468	468	-
Stage 2	-	-	-	-	-	-	256	473	-	156	316	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1119	-	-	1252	-	-	408	324	858	370	323	777
Stage 1	-	-	-	-	-	-	676	658	-	545	560	-
Stage 2	-	-	-	-	-	-	726	557	-	831	654	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1116	-	-	1246	-	-	391	314	851	345	313	770
Mov Cap-2 Maneuver	-	-	-	-	-	-	391	314	-	345	313	-
Stage 1	-	-	-	-	-	-	669	651	-	541	548	-
Stage 2	-	-	-	-	-	-	700	545	-	787	647	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.4	13.4	14.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	516	1116	-	-	1246	-	-	410
HCM Lane V/C Ratio	0.167	0.004	-	-	0.015	-	-	0.033
HCM Control Delay (s)	13.4	8.2	0	-	7.9	0.1	-	14.1
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	222	155	29	239	18	153	252	37	24	212	133
Future Volume (veh/h)	83	222	155	29	239	18	153	252	37	24	212	133
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	89	239	167	31	257	19	165	271	40	26	228	143
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	234	367	310	222	320	266	536	1571	229	627	496	311
Arrive On Green	0.06	0.20	0.20	0.03	0.17	0.17	0.07	0.51	0.51	0.03	0.46	0.46
Sat Flow, veh/h	1781	1870	1580	1781	1870	1559	1781	3111	454	1781	1074	674
Grp Volume(v), veh/h	89	239	167	31	257	19	165	153	158	26	0	371
Grp Sat Flow(s),veh/h/ln	1781	1870	1580	1781	1870	1559	1781	1777	1788	1781	0	1748
Q Serve(g_s), s	3.2	9.4	7.6	1.1	10.6	0.8	3.8	3.7	3.8	0.6	0.0	11.6
Cycle Q Clear(g_c), s	3.2	9.4	7.6	1.1	10.6	0.8	3.8	3.7	3.8	0.6	0.0	11.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.25	1.00		0.39
Lane Grp Cap(c), veh/h	234	367	310	222	320	266	536	897	903	627	0	807
V/C Ratio(X)	0.38	0.65	0.54	0.14	0.80	0.07	0.31	0.17	0.17	0.04	0.00	0.46
Avail Cap(c_a), veh/h	295	498	421	330	498	415	572	897	903	741	0	807
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.9	29.6	28.9	24.9	31.9	27.8	10.6	10.7	10.7	9.0	0.0	14.7
Incr Delay (d2), s/veh	0.4	1.9	1.4	0.1	5.3	0.1	0.1	0.4	0.4	0.0	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	4.3	2.9	0.5	5.1	0.3	1.4	1.5	1.5	0.2	0.0	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.3	31.6	30.3	25.0	37.1	27.9	10.8	11.1	11.2	9.0	0.0	16.6
LnGrp LOS	C	C	C	C	D	C	B	B	B	A	A	B
Approach Vol, veh/h		495			307			476			397	
Approach Delay, s/veh		30.2			35.3			11.0			16.1	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	42.0	9.2	18.4	6.9	45.5	7.2	20.4
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	* 4.7	* 4.7	5.1	* 4.7	* 4.7
Max Green Setting (Gmax), s	* 7.3	24.9	* 7.3	* 21	* 7.3	24.9	* 7.3	* 21
Max Q Clear Time (g_c+I1), s	5.8	13.6	5.2	12.6	2.6	5.8	3.1	11.4
Green Ext Time (p_c), s	0.0	1.8	0.0	1.0	0.0	1.7	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	22.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	146	21	139	311	50	28	322	115	42	405	144
Future Volume (veh/h)	90	146	21	139	311	50	28	322	115	42	405	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1841	1870	1870	1870	1870	1856	1826	1870	1870	1870
Adj Flow Rate, veh/h	94	152	22	145	324	52	29	335	120	44	422	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	4	2	2	2	2	3	5	2	2	2
Cap, veh/h	167	397	57	193	414	66	80	789	278	109	1155	
Arrive On Green	0.09	0.25	0.25	0.11	0.26	0.26	0.04	0.31	0.31	0.06	0.33	0.00
Sat Flow, veh/h	1781	1598	231	1781	1573	252	1781	2556	900	1781	3554	1585
Grp Volume(v), veh/h	94	0	174	145	0	376	29	229	226	44	422	0
Grp Sat Flow(s),veh/h/ln	1781	0	1829	1781	0	1825	1781	1763	1693	1781	1777	1585
Q Serve(g_s), s	3.0	0.0	4.6	4.6	0.0	11.2	0.9	6.0	6.2	1.4	5.3	0.0
Cycle Q Clear(g_c), s	3.0	0.0	4.6	4.6	0.0	11.2	0.9	6.0	6.2	1.4	5.3	0.0
Prop In Lane	1.00		0.13	1.00		0.14	1.00		0.53	1.00		1.00
Lane Grp Cap(c), veh/h	167	0	454	193	0	480	80	544	523	109	1155	
V/C Ratio(X)	0.56	0.00	0.38	0.75	0.00	0.78	0.36	0.42	0.43	0.40	0.37	
Avail Cap(c_a), veh/h	517	0	1093	517	0	1091	304	903	867	304	1821	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.4	0.0	18.3	25.3	0.0	20.0	27.1	16.1	16.1	26.5	15.1	0.0
Incr Delay (d2), s/veh	2.2	0.0	0.5	4.4	0.0	2.8	1.0	1.9	2.0	1.8	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	1.9	2.0	0.0	4.6	0.4	2.4	2.4	0.6	2.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.6	0.0	18.8	29.7	0.0	22.9	28.2	17.9	18.2	28.2	15.8	0.0
LnGrp LOS	C	A	B	C	A	C	C	B	B	C	B	
Approach Vol, veh/h		268			521			484			466	A
Approach Delay, s/veh		21.9			24.8			18.7			17.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.1	23.5	9.0	19.9	7.1	22.6	9.8	19.0
Change Period (Y+Rc), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Max Green Setting (Gmax), s	10.6	30.0	17.0	35.0	10.0	30.0	17.0	35.0
Max Q Clear Time (g_c+I1), s	2.9	7.3	5.0	13.2	3.4	8.2	6.6	6.6
Green Ext Time (p_c), s	0.0	6.0	0.1	2.2	0.0	6.1	0.2	1.0

Intersection Summary	
HCM 6th Ctrl Delay	20.5
HCM 6th LOS	C

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	32	56	69	433	551	14
Future Volume (veh/h)	32	56	69	433	551	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1870	1870	1811	1870	1870
Adj Flow Rate, veh/h	38	66	81	509	648	16
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	4	2	2	6	2	2
Cap, veh/h	292	136	132	2281	1686	42
Arrive On Green	0.09	0.09	0.07	0.66	0.48	0.48
Sat Flow, veh/h	3401	1585	1781	3532	3638	87
Grp Volume(v), veh/h	38	66	81	509	325	339
Grp Sat Flow(s),veh/h/ln	1700	1585	1781	1721	1777	1855
Q Serve(g_s), s	0.4	1.6	1.8	2.3	4.7	4.7
Cycle Q Clear(g_c), s	0.4	1.6	1.8	2.3	4.7	4.7
Prop In Lane	1.00	1.00	1.00			0.05
Lane Grp Cap(c), veh/h	292	136	132	2281	845	882
V/C Ratio(X)	0.13	0.49	0.61	0.22	0.38	0.38
Avail Cap(c_a), veh/h	1965	916	671	4322	2231	2329
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.8	17.4	17.9	2.7	6.7	6.7
Incr Delay (d2), s/veh	0.1	1.0	1.7	0.2	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.7	0.2	1.3	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.9	18.4	19.6	2.8	7.7	7.7
LnGrp LOS	B	B	B	A	A	A
Approach Vol, veh/h	104			590	664	
Approach Delay, s/veh	17.8			5.1	7.7	
Approach LOS	B			A	A	

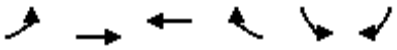
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		31.4		8.4	7.5	23.9
Change Period (Y+Rc), s		5.0		5.0	4.5	5.0
Max Green Setting (Gmax), s		50.0		23.0	15.0	50.0
Max Q Clear Time (g_c+I1), s		4.3		3.6	3.8	6.7
Green Ext Time (p_c), s		9.6		0.1	0.1	12.3

Intersection Summary	
HCM 6th Ctrl Delay	7.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	160	13	18	175	155	21	235	13	99	341	167
Future Volume (veh/h)	112	160	13	18	175	155	21	235	13	99	341	167
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1856	1870	1856	1870	1870	1856	1870
Adj Flow Rate, veh/h	119	170	14	19	186	165	22	250	14	105	363	178
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	3	2	3	2	2	3	2
Cap, veh/h	384	452	446	373	315	428	444	1049	58	581	1316	765
Arrive On Green	0.11	0.24	0.24	0.04	0.17	0.17	0.04	0.31	0.31	0.10	0.37	0.37
Sat Flow, veh/h	1781	1870	1579	1781	1870	1564	1781	3395	189	1781	3526	1585
Grp Volume(v), veh/h	119	170	14	19	186	165	22	129	135	105	363	178
Grp Sat Flow(s),veh/h/ln	1781	1870	1579	1781	1870	1564	1781	1763	1821	1781	1763	1585
Q Serve(g_s), s	3.3	4.9	0.4	0.5	5.9	5.5	0.5	3.5	3.6	2.4	4.7	4.2
Cycle Q Clear(g_c), s	3.3	4.9	0.4	0.5	5.9	5.5	0.5	3.5	3.6	2.4	4.7	4.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	384	452	446	373	315	428	444	544	563	581	1316	765
V/C Ratio(X)	0.31	0.38	0.03	0.05	0.59	0.39	0.05	0.24	0.24	0.18	0.28	0.23
Avail Cap(c_a), veh/h	740	1155	1039	860	866	889	922	953	984	944	1905	1029
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.4	20.5	16.8	17.3	24.9	19.1	11.4	16.7	16.7	11.9	14.2	9.8
Incr Delay (d2), s/veh	0.5	0.4	0.0	0.1	1.3	0.4	0.0	0.2	0.2	0.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.0	0.1	0.2	2.6	1.9	0.2	1.3	1.4	0.8	1.7	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.9	20.9	16.9	17.3	26.2	19.5	11.5	16.9	16.9	12.1	14.3	9.9
LnGrp LOS	B	C	B	B	C	B	B	B	B	B	B	A
Approach Vol, veh/h		303			370			286			646	
Approach Delay, s/veh		19.9			22.8			16.4			12.7	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	25.0	7.3	20.7	7.6	29.2	12.1	15.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	20.0	35.0	20.0	40.0	20.0	35.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	4.4	5.6	2.5	6.9	2.5	6.7	5.3	7.9
Green Ext Time (p_c), s	0.2	1.2	0.0	0.8	0.0	2.4	0.2	1.2

Intersection Summary	
HCM 6th Ctrl Delay	17.0
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	226	546	638	43	47	325
Future Volume (veh/h)	226	546	638	43	47	325
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1767	1870	1870	1870	1870	1796
Adj Flow Rate, veh/h	233	563	658	44	48	335
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	9	2	2	2	2	7
Cap, veh/h	263	2579	1765	787	266	400
Arrive On Green	0.16	0.73	0.50	0.50	0.15	0.15
Sat Flow, veh/h	1682	3647	3647	1585	1781	2679
Grp Volume(v), veh/h	233	563	658	44	48	335
Grp Sat Flow(s),veh/h/ln	1682	1777	1777	1585	1781	1340
Q Serve(g_s), s	13.0	5.0	11.0	1.4	2.3	11.7
Cycle Q Clear(g_c), s	13.0	5.0	11.0	1.4	2.3	11.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	263	2579	1765	787	266	400
V/C Ratio(X)	0.89	0.22	0.37	0.06	0.18	0.84
Avail Cap(c_a), veh/h	263	2579	1765	787	464	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.98	0.98
Uniform Delay (d), s/veh	39.7	4.3	14.9	12.5	35.7	39.7
Incr Delay (d2), s/veh	27.5	0.2	0.6	0.1	0.1	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	1.2	4.0	0.5	1.0	8.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	67.2	4.5	15.5	12.6	35.8	41.5
LnGrp LOS	E	A	B	B	D	D
Approach Vol, veh/h		796	702		383	
Approach Delay, s/veh		22.8	15.3		40.8	
Approach LOS		C	B		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		76.7		19.3	22.0	54.7
Change Period (Y+Rc), s		7.0		5.0	7.0	7.0
Max Green Setting (Gmax), s		59.0		25.0	15.0	37.0
Max Q Clear Time (g_c+I1), s		7.0		13.7	15.0	13.0
Green Ext Time (p_c), s		3.5		0.7	0.0	4.0

Intersection Summary	
HCM 6th Ctrl Delay	23.7
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	1	0	0	0	20	310	0	0	312	3
Future Vol, veh/h	0	0	1	0	0	0	20	310	0	0	312	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	135	-	-	0	-	-	150	-	-	140	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	15	4	0	2	8	2
Mvmt Flow	0	0	1	0	0	0	23	352	0	0	355	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	579	755	179	576	756	176	358	0	0	352	0	0
Stage 1	357	357	-	398	398	-	-	-	-	-	-	-
Stage 2	222	398	-	178	358	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.4	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.35	-	-	2.22	-	-
Pot Cap-1 Maneuver	398	336	833	400	336	837	1109	-	-	1203	-	-
Stage 1	633	627	-	599	601	-	-	-	-	-	-	-
Stage 2	760	601	-	806	626	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	392	329	833	393	329	837	1109	-	-	1203	-	-
Mov Cap-2 Maneuver	392	329	-	393	329	-	-	-	-	-	-	-
Stage 1	620	627	-	586	588	-	-	-	-	-	-	-
Stage 2	744	588	-	805	626	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	0	0.5	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1109	-	-	-	833	-	-	1203	-	-
HCM Lane V/C Ratio	0.02	-	-	-	0.001	-	-	-	-	-
HCM Control Delay (s)	8.3	-	-	0	9.3	0	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	0	-	-	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	311	171	8	9	1
Future Vol, veh/h	6	311	171	8	9	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	3	2	2	2
Mvmt Flow	7	353	194	9	10	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	203	0	-	0	390	102
Stage 1	-	-	-	-	199	-
Stage 2	-	-	-	-	191	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1366	-	-	-	586	933
Stage 1	-	-	-	-	815	-
Stage 2	-	-	-	-	822	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1366	-	-	-	582	933
Mov Cap-2 Maneuver	-	-	-	-	582	-
Stage 1	-	-	-	-	810	-
Stage 2	-	-	-	-	822	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1366	-	-	-	605
HCM Lane V/C Ratio	0.005	-	-	-	0.019
HCM Control Delay (s)	7.6	0	-	-	11.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	296	18	21	159	8	16	4	14	1	3	5
Future Vol, veh/h	6	296	18	21	159	8	16	4	14	1	3	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	4	2	2	2	10	2	2	2
Mvmt Flow	7	336	20	24	181	9	18	5	16	1	3	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	190	0	0	356	0	0	500	598	178	419	604	95
Stage 1	-	-	-	-	-	-	360	360	-	234	234	-
Stage 2	-	-	-	-	-	-	140	238	-	185	370	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	7.1	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.4	3.52	4.02	3.32
Pot Cap-1 Maneuver	1381	-	-	1199	-	-	454	414	810	518	411	943
Stage 1	-	-	-	-	-	-	631	625	-	748	710	-
Stage 2	-	-	-	-	-	-	849	707	-	799	619	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1381	-	-	1199	-	-	439	402	810	493	399	943
Mov Cap-2 Maneuver	-	-	-	-	-	-	439	402	-	493	399	-
Stage 1	-	-	-	-	-	-	627	621	-	744	694	-
Stage 2	-	-	-	-	-	-	821	691	-	773	615	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1	12.3	11
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	534	1381	-	-	1199	-	-	606
HCM Lane V/C Ratio	0.072	0.005	-	-	0.02	-	-	0.017
HCM Control Delay (s)	12.3	7.6	0	-	8.1	0.1	-	11
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.1

MOVEMENT SUMMARY

Site: 1 [PM 2025 Without Project]

Myra Road / Heritage Road / Pine Street Intersection
Site Category: Roundabout Intersection
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Myra Road												
3	L2	8	2.0	0.150	9.5	LOS A	0.8	20.3	0.36	0.36	0.36	35.7
8	T1	334	4.0	0.150	3.0	LOS A	0.8	20.9	0.35	0.36	0.35	34.0
18	R2	79	2.0	0.150	3.5	LOS A	0.8	20.9	0.34	0.36	0.34	30.8
Approach		421	3.6	0.150	3.2	LOS A	0.8	20.9	0.35	0.36	0.35	33.4
East: Pine Street												
1	L2	73	2.0	0.206	8.3	LOS A	0.8	19.9	0.41	0.49	0.41	31.6
6	T1	67	2.0	0.206	2.1	LOS A	0.8	19.9	0.41	0.49	0.41	32.5
16	R2	84	2.0	0.206	2.9	LOS A	0.8	19.9	0.41	0.49	0.41	30.2
Approach		224	2.0	0.206	4.4	LOS A	0.8	19.9	0.41	0.49	0.41	31.3
North: Myra Road												
7	L2	57	2.0	0.178	9.3	LOS A	1.0	24.9	0.33	0.41	0.33	32.2
4	T1	348	2.0	0.178	2.8	LOS A	1.0	25.7	0.32	0.38	0.32	33.9
14	R2	116	2.0	0.178	3.4	LOS A	1.0	25.7	0.31	0.35	0.31	34.5
Approach		521	2.0	0.178	3.6	LOS A	1.0	25.7	0.32	0.38	0.32	33.8
West: Heritage Road												
5	L2	84	2.0	0.156	11.3	LOS B	0.6	14.5	0.41	0.63	0.41	34.8
2	T1	58	2.0	0.156	4.6	LOS A	0.6	14.5	0.41	0.63	0.41	32.2
12	R2	25	2.0	0.156	4.8	LOS A	0.6	14.5	0.41	0.63	0.41	33.1
Approach		167	2.0	0.156	8.0	LOS A	0.6	14.5	0.41	0.63	0.41	33.6
All Vehicles		1334	2.5	0.206	4.2	LOS A	1.0	25.7	0.35	0.42	0.35	33.2

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	180	145	76	133	0	147	2	104	2	3	3
Future Vol, veh/h	4	180	145	76	133	0	147	2	104	2	3	3
Conflicting Peds, #/hr	7	0	0	0	0	7	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	4	3	7	2	6	2	4	2	2	2
Mvmt Flow	4	189	153	80	140	0	155	2	109	2	3	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	147	0	0	342	0	0	578	581	267	637	657	148
Stage 1	-	-	-	-	-	-	274	274	-	307	307	-
Stage 2	-	-	-	-	-	-	304	307	-	330	350	-
Critical Hdwy	4.12	-	-	4.13	-	-	7.16	6.52	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.16	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.16	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.554	4.018	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1435	-	-	1211	-	-	421	425	767	390	385	899
Stage 1	-	-	-	-	-	-	723	683	-	703	661	-
Stage 2	-	-	-	-	-	-	697	661	-	683	633	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1425	-	-	1211	-	-	392	390	766	311	353	892
Mov Cap-2 Maneuver	-	-	-	-	-	-	392	390	-	311	353	-
Stage 1	-	-	-	-	-	-	720	680	-	695	609	-
Stage 2	-	-	-	-	-	-	641	609	-	581	630	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	3	20.8	13.4
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	490	1425	-	-	1211	-	-	437
HCM Lane V/C Ratio	0.544	0.003	-	-	0.066	-	-	0.019
HCM Control Delay (s)	20.8	7.5	0	-	8.2	0	-	13.4
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	3.2	0	-	-	0.2	-	-	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	0	6	0	0	0	0	391	0	0	425	0
Future Vol, veh/h	9	0	6	0	0	0	0	391	0	0	425	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	135	-	-	0	-	-	150	-	-	140	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	3	2	2	2	2
Mvmt Flow	10	0	7	0	0	0	0	425	0	0	462	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	675	887	231	656	887	213	462	0	0	425	0	0
Stage 1	462	462	-	425	425	-	-	-	-	-	-	-
Stage 2	213	425	-	231	462	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	340	282	771	351	282	792	1095	-	-	1131	-	-
Stage 1	549	563	-	578	585	-	-	-	-	-	-	-
Stage 2	769	585	-	751	563	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	340	282	771	348	282	792	1095	-	-	1131	-	-
Mov Cap-2 Maneuver	340	282	-	348	282	-	-	-	-	-	-	-
Stage 1	549	563	-	578	585	-	-	-	-	-	-	-
Stage 2	769	585	-	745	563	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.4	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1095	-	-	340	771	-	-	1131	-	-
HCM Lane V/C Ratio	-	-	-	0.029	0.008	-	-	-	-	-
HCM Control Delay (s)	0	-	-	15.9	9.7	0	0	0	-	-
HCM Lane LOS	A	-	-	C	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	-	-	0	-	-

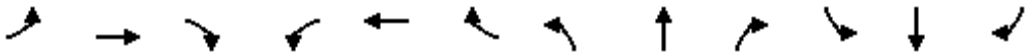
Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	159	0	41	164	96	0	7	1	60	8	1
Future Vol, veh/h	0	159	0	41	164	96	0	7	1	60	8	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	95	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	6	2	2
Mvmt Flow	0	173	0	45	178	104	0	8	1	65	9	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	282	0	0	173	0	0	498	545	173	498	493	230
Stage 1	-	-	-	-	-	-	173	173	-	320	320	-
Stage 2	-	-	-	-	-	-	325	372	-	178	173	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.16	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.16	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.16	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.554	4.018	3.318
Pot Cap-1 Maneuver	1280	-	-	1404	-	-	483	446	871	476	477	809
Stage 1	-	-	-	-	-	-	829	756	-	683	652	-
Stage 2	-	-	-	-	-	-	687	619	-	815	756	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1280	-	-	1404	-	-	464	432	871	457	462	809
Mov Cap-2 Maneuver	-	-	-	-	-	-	464	432	-	457	462	-
Stage 1	-	-	-	-	-	-	829	756	-	683	631	-
Stage 2	-	-	-	-	-	-	655	599	-	806	756	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1	13	14.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	461	1280	-	-	1404	-	-	460
HCM Lane V/C Ratio	0.019	-	-	-	0.032	-	-	0.163
HCM Control Delay (s)	13	0	-	-	7.6	-	-	14.3
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0.6



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	137	38	164	209	62	54	284	96	38	355	38
Future Volume (veh/h)	45	137	38	164	209	62	54	284	96	38	355	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1856	1856	1870	1856	1870	1870	1856	1870	1722	1870	1870
Adj Flow Rate, veh/h	47	144	0	173	220	0	57	299	101	40	374	40
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	3	3	2	3	2	2	3	2	12	2	2
Cap, veh/h	156	602		274	828		180	783	259	132	965	103
Arrive On Green	0.09	0.17	0.00	0.15	0.23	0.00	0.10	0.30	0.30	0.08	0.30	0.30
Sat Flow, veh/h	1739	3526	1572	1781	3526	1585	1781	2590	856	1640	3239	344
Grp Volume(v), veh/h	47	144	0	173	220	0	57	201	199	40	204	210
Grp Sat Flow(s),veh/h/ln	1739	1763	1572	1781	1763	1585	1781	1763	1684	1640	1777	1807
Q Serve(g_s), s	1.6	2.2	0.0	5.6	3.1	0.0	1.8	5.5	5.7	1.4	5.6	5.7
Cycle Q Clear(g_c), s	1.6	2.2	0.0	5.6	3.1	0.0	1.8	5.5	5.7	1.4	5.6	5.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.51	1.00		0.19
Lane Grp Cap(c), veh/h	156	602		274	828		180	533	509	132	529	538
V/C Ratio(X)	0.30	0.24		0.63	0.27		0.32	0.38	0.39	0.30	0.39	0.39
Avail Cap(c_a), veh/h	424	1146		434	1146		434	1432	1368	400	1444	1468
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.2	22.1	0.0	24.4	19.2	0.0	25.7	16.9	17.0	26.7	17.1	17.2
Incr Delay (d2), s/veh	0.4	0.2	0.0	0.9	0.1	0.0	0.4	1.6	1.8	0.5	1.7	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.8	0.0	2.2	1.2	0.0	0.7	2.2	2.2	0.5	2.3	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.6	22.2	0.0	25.3	19.3	0.0	26.1	18.5	18.7	27.1	18.8	18.8
LnGrp LOS	C	C		C	B		C	B	B	C	B	B
Approach Vol, veh/h		191	A		393	A		457			454	
Approach Delay, s/veh		23.3			22.0			19.6			19.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	23.6	13.5	14.5	10.2	23.3	9.5	18.5
Change Period (Y+Rc), s	5.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	50.0	15.0	20.0	15.0	50.0	15.0	20.0
Max Q Clear Time (g_c+I1), s	3.4	7.7	7.6	4.2	3.8	7.7	3.6	5.1
Green Ext Time (p_c), s	0.0	6.7	0.1	0.5	0.0	6.9	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	20.7
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	266	428	13	17	7
Future Vol, veh/h	4	266	428	13	17	7
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	299	481	15	19	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	496	0	-	0	647	249
Stage 1	-	-	-	-	489	-
Stage 2	-	-	-	-	158	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1064	-	-	-	404	751
Stage 1	-	-	-	-	582	-
Stage 2	-	-	-	-	854	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1064	-	-	-	402	750
Mov Cap-2 Maneuver	-	-	-	-	402	-
Stage 1	-	-	-	-	579	-
Stage 2	-	-	-	-	854	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	13.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1064	-	-	-	465
HCM Lane V/C Ratio	0.004	-	-	-	0.058
HCM Control Delay (s)	8.4	0	-	-	13.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

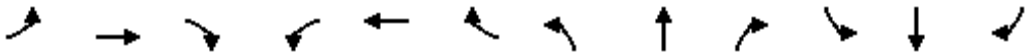
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	265	14	17	392	9	44	0	36	5	3	4
Future Vol, veh/h	4	265	14	17	392	9	44	0	36	5	3	4
Conflicting Peds, #/hr	3	0	5	5	0	3	6	0	3	3	0	6
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	301	16	19	445	10	50	0	41	6	3	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	458	0	0	322	0	0	592	820	167	655	823	237
Stage 1	-	-	-	-	-	-	324	324	-	491	491	-
Stage 2	-	-	-	-	-	-	268	496	-	164	332	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1099	-	-	1235	-	-	390	308	848	351	307	764
Stage 1	-	-	-	-	-	-	662	648	-	528	546	-
Stage 2	-	-	-	-	-	-	714	544	-	822	643	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1096	-	-	1229	-	-	372	297	842	325	296	757
Mov Cap-2 Maneuver	-	-	-	-	-	-	372	297	-	325	296	-
Stage 1	-	-	-	-	-	-	655	641	-	523	533	-
Stage 2	-	-	-	-	-	-	686	531	-	775	636	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.4	13.9	14.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	497	1096	-	-	1229	-	-	390
HCM Lane V/C Ratio	0.183	0.004	-	-	0.016	-	-	0.035
HCM Control Delay (s)	13.9	8.3	0	-	8	0.1	-	14.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.7	0	-	-	0	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	233	163	30	251	19	161	265	39	25	223	140
Future Volume (veh/h)	87	233	163	30	251	19	161	265	39	25	223	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	245	172	32	264	20	169	279	41	26	235	147
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	236	376	318	225	326	272	522	1556	226	615	489	306
Arrive On Green	0.06	0.20	0.20	0.03	0.17	0.17	0.07	0.50	0.50	0.03	0.45	0.45
Sat Flow, veh/h	1781	1870	1580	1781	1870	1559	1781	3113	452	1781	1076	673
Grp Volume(v), veh/h	92	245	172	32	264	20	169	158	162	26	0	382
Grp Sat Flow(s),veh/h/ln	1781	1870	1580	1781	1870	1559	1781	1777	1788	1781	0	1748
Q Serve(g_s), s	3.3	9.6	7.8	1.1	10.9	0.9	4.0	3.9	4.0	0.6	0.0	12.2
Cycle Q Clear(g_c), s	3.3	9.6	7.8	1.1	10.9	0.9	4.0	3.9	4.0	0.6	0.0	12.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.25	1.00		0.38
Lane Grp Cap(c), veh/h	236	376	318	225	326	272	522	888	894	615	0	794
V/C Ratio(X)	0.39	0.65	0.54	0.14	0.81	0.07	0.32	0.18	0.18	0.04	0.00	0.48
Avail Cap(c_a), veh/h	295	498	421	330	498	415	555	888	894	729	0	794
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.6	29.4	28.7	24.6	31.7	27.6	11.0	11.0	11.0	9.2	0.0	15.2
Incr Delay (d2), s/veh	0.4	1.9	1.4	0.1	5.8	0.1	0.1	0.4	0.4	0.0	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	4.4	3.0	0.5	5.3	0.3	1.4	1.5	1.6	0.2	0.0	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.0	31.3	30.1	24.7	37.5	27.7	11.1	11.4	11.4	9.2	0.0	17.3
LnGrp LOS	C	C	C	C	D	C	B	B	B	A	A	B
Approach Vol, veh/h		509			316			489			408	
Approach Delay, s/veh		29.9			35.6			11.3			16.8	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	41.4	9.4	18.7	6.9	45.1	7.2	20.8
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	* 4.7	* 4.7	5.1	* 4.7	* 4.7
Max Green Setting (Gmax), s	* 7.3	24.9	* 7.3	* 21	* 7.3	24.9	* 7.3	* 21
Max Q Clear Time (g_c+I1), s	6.0	14.2	5.3	12.9	2.6	6.0	3.1	11.6
Green Ext Time (p_c), s	0.0	1.8	0.0	1.0	0.0	1.7	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	22.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	153	2	146	327	53	29	338	121	44	426	151
Future Volume (veh/h)	95	153	2	146	327	53	29	338	121	44	426	151
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1841	1870	1870	1870	1870	1856	1826	1870	1870	1870
Adj Flow Rate, veh/h	99	159	2	152	341	55	30	352	126	46	444	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	4	2	2	2	2	3	5	2	2	2
Cap, veh/h	168	475	6	196	430	69	82	772	272	111	1133	
Arrive On Green	0.09	0.26	0.26	0.11	0.27	0.27	0.05	0.30	0.30	0.06	0.32	0.00
Sat Flow, veh/h	1781	1843	23	1781	1571	253	1781	2555	900	1781	3554	1585
Grp Volume(v), veh/h	99	0	161	152	0	396	30	241	237	46	444	0
Grp Sat Flow(s),veh/h/ln	1781	0	1866	1781	0	1825	1781	1763	1692	1781	1777	1585
Q Serve(g_s), s	3.2	0.0	4.2	5.0	0.0	12.1	1.0	6.6	6.8	1.5	5.8	0.0
Cycle Q Clear(g_c), s	3.2	0.0	4.2	5.0	0.0	12.1	1.0	6.6	6.8	1.5	5.8	0.0
Prop In Lane	1.00		0.01	1.00		0.14	1.00		0.53	1.00		1.00
Lane Grp Cap(c), veh/h	168	0	481	196	0	499	82	533	511	111	1133	
V/C Ratio(X)	0.59	0.00	0.33	0.78	0.00	0.79	0.37	0.45	0.46	0.41	0.39	
Avail Cap(c_a), veh/h	506	0	1091	506	0	1067	298	884	848	298	1781	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.0	0.0	18.0	25.9	0.0	20.2	27.7	16.9	16.9	27.0	15.9	0.0
Incr Delay (d2), s/veh	2.4	0.0	0.4	4.8	0.0	2.9	1.0	2.2	2.4	1.8	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	1.8	2.2	0.0	4.9	0.4	2.7	2.7	0.6	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.4	0.0	18.4	30.8	0.0	23.1	28.7	19.1	19.3	28.8	16.7	0.0
LnGrp LOS	C	A	B	C	A	C	C	B	B	C	B	
Approach Vol, veh/h		260			548			508			490	A
Approach Delay, s/veh		22.2			25.2			19.7			17.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.2	23.6	9.2	20.9	7.2	22.6	10.1	19.9
Change Period (Y+Rc), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Max Green Setting (Gmax), s	10.0	30.0	17.0	35.0	10.0	30.0	17.0	35.0
Max Q Clear Time (g_c+I1), s	3.0	7.8	5.2	14.1	3.5	8.8	7.0	6.2
Green Ext Time (p_c), s	0.0	6.3	0.1	2.3	0.0	6.4	0.2	0.9

Intersection Summary	
HCM 6th Ctrl Delay	21.2
HCM 6th LOS	C

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	34	59	73	455	579	15
Future Volume (veh/h)	34	59	73	455	579	15
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1870	1870	1811	1870	1870
Adj Flow Rate, veh/h	37	64	79	495	629	16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	2	2	6	2	2
Cap, veh/h	290	135	131	2266	1662	42
Arrive On Green	0.09	0.09	0.07	0.66	0.47	0.47
Sat Flow, veh/h	3401	1585	1781	3532	3634	90
Grp Volume(v), veh/h	37	64	79	495	315	330
Grp Sat Flow(s),veh/h/ln	1700	1585	1781	1721	1777	1854
Q Serve(g_s), s	0.4	1.5	1.7	2.2	4.5	4.5
Cycle Q Clear(g_c), s	0.4	1.5	1.7	2.2	4.5	4.5
Prop In Lane	1.00	1.00	1.00			0.05
Lane Grp Cap(c), veh/h	290	135	131	2266	834	870
V/C Ratio(X)	0.13	0.47	0.60	0.22	0.38	0.38
Avail Cap(c_a), veh/h	2005	934	685	4410	2277	2376
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.5	17.0	17.5	2.7	6.7	6.7
Incr Delay (d2), s/veh	0.1	1.0	1.6	0.2	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.6	0.2	1.3	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.6	18.0	19.2	2.8	7.7	7.7
LnGrp LOS	B	B	B	A	A	A
Approach Vol, veh/h	101			574	645	
Approach Delay, s/veh	17.5			5.1	7.7	
Approach LOS	B			A	A	

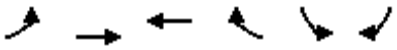
Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	30.7		8.3	7.4	23.3
Change Period (Y+Rc), s	5.0		5.0	4.5	5.0
Max Green Setting (Gmax), s	50.0		23.0	15.0	50.0
Max Q Clear Time (g_c+I1), s	4.2		3.5	3.7	6.5
Green Ext Time (p_c), s	9.3		0.1	0.1	11.8

Intersection Summary	
HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	168	14	19	184	163	22	247	14	104	358	176
Future Volume (veh/h)	118	168	14	19	184	163	22	247	14	104	358	176
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1856	1870	1856	1870	1870	1856	1870
Adj Flow Rate, veh/h	124	177	15	20	194	172	23	260	15	109	377	185
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	3	2	3	2	2	3	2
Cap, veh/h	380	450	447	369	314	429	437	1044	60	576	1312	764
Arrive On Green	0.11	0.24	0.24	0.04	0.17	0.17	0.04	0.31	0.31	0.11	0.37	0.37
Sat Flow, veh/h	1781	1870	1579	1781	1870	1564	1781	3389	195	1781	3526	1585
Grp Volume(v), veh/h	124	177	15	20	194	172	23	135	140	109	377	185
Grp Sat Flow(s),veh/h/ln	1781	1870	1579	1781	1870	1564	1781	1763	1821	1781	1763	1585
Q Serve(g_s), s	3.5	5.2	0.4	0.5	6.3	5.8	0.5	3.7	3.8	2.5	4.9	4.4
Cycle Q Clear(g_c), s	3.5	5.2	0.4	0.5	6.3	5.8	0.5	3.7	3.8	2.5	4.9	4.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	380	450	447	369	314	429	437	543	561	576	1312	764
V/C Ratio(X)	0.33	0.39	0.03	0.05	0.62	0.40	0.05	0.25	0.25	0.19	0.29	0.24
Avail Cap(c_a), veh/h	732	1152	1039	851	864	889	911	950	981	936	1900	1029
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.5	20.7	16.9	17.3	25.1	19.2	11.5	16.8	16.8	12.0	14.3	9.9
Incr Delay (d2), s/veh	0.5	0.4	0.0	0.1	1.5	0.4	0.0	0.2	0.2	0.2	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	2.1	0.2	0.2	2.7	2.0	0.2	1.4	1.5	0.9	1.7	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.0	21.1	16.9	17.4	26.5	19.7	11.5	17.0	17.0	12.2	14.4	10.0
LnGrp LOS	B	C	B	B	C	B	B	B	B	B	B	A
Approach Vol, veh/h		316			386			298			671	
Approach Delay, s/veh		20.1			23.0			16.6			12.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	25.0	7.4	20.6	7.7	29.2	12.1	15.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	20.0	35.0	20.0	40.0	20.0	35.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	4.5	5.8	2.5	7.2	2.5	6.9	5.5	8.3
Green Ext Time (p_c), s	0.2	1.2	0.0	0.8	0.0	2.5	0.2	1.2

Intersection Summary	
HCM 6th Ctrl Delay	17.2
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	238	574	671	45	49	342
Future Volume (veh/h)	238	574	671	45	49	342
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1767	1870	1870	1870	1870	1796
Adj Flow Rate, veh/h	245	592	692	46	51	353
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	9	2	2	2	2	7
Cap, veh/h	263	2555	1740	776	278	418
Arrive On Green	0.16	0.72	0.49	0.49	0.16	0.16
Sat Flow, veh/h	1682	3647	3647	1585	1781	2679
Grp Volume(v), veh/h	245	592	692	46	51	353
Grp Sat Flow(s),veh/h/ln	1682	1777	1777	1585	1781	1340
Q Serve(g_s), s	13.8	5.4	11.8	1.5	2.4	12.3
Cycle Q Clear(g_c), s	13.8	5.4	11.8	1.5	2.4	12.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	263	2555	1740	776	278	418
V/C Ratio(X)	0.93	0.23	0.40	0.06	0.18	0.84
Avail Cap(c_a), veh/h	263	2555	1740	776	464	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.97	0.97
Uniform Delay (d), s/veh	40.0	4.5	15.5	12.9	35.2	39.4
Incr Delay (d2), s/veh	37.1	0.2	0.7	0.1	0.1	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	1.3	4.3	0.5	1.0	8.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	77.1	4.8	16.2	13.0	35.3	41.4
LnGrp LOS	E	A	B	B	D	D
Approach Vol, veh/h		837	738		404	
Approach Delay, s/veh		25.9	16.0		40.6	
Approach LOS		C	B		D	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	76.0		20.0	22.0	54.0
Change Period (Y+Rc), s	7.0		5.0	7.0	7.0
Max Green Setting (Gmax), s	59.0		25.0	15.0	37.0
Max Q Clear Time (g_c+I1), s	7.4		14.3	15.8	13.8
Green Ext Time (p_c), s	3.8		0.7	0.0	4.3

Intersection Summary	
HCM 6th Ctrl Delay	25.2
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	7.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	1	115	0	139	20	253	118	128	255	3
Future Vol, veh/h	0	0	1	115	0	139	20	253	118	128	255	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	135	-	-	0	-	-	150	-	-	140	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	15	4	0	2	8	2
Mvmt Flow	0	0	1	131	0	158	23	288	134	145	290	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	772	1050	147	836	984	211	293	0	0	422	0	0
Stage 1	582	582	-	401	401	-	-	-	-	-	-	-
Stage 2	190	468	-	435	583	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.4	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.35	-	-	2.22	-	-
Pot Cap-1 Maneuver	289	226	873	260	247	794	1176	-	-	1134	-	-
Stage 1	466	497	-	597	599	-	-	-	-	-	-	-
Stage 2	794	560	-	570	497	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	206	193	873	231	211	794	1176	-	-	1134	-	-
Mov Cap-2 Maneuver	206	193	-	231	211	-	-	-	-	-	-	-
Stage 1	457	433	-	585	587	-	-	-	-	-	-	-
Stage 2	624	549	-	496	433	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.1	23.6	0.4	2.9
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1176	-	-	-	873	231	794	1134	-	-
HCM Lane V/C Ratio	0.019	-	-	-	0.001	0.566	0.199	0.128	-	-
HCM Control Delay (s)	8.1	-	-	0	9.1	39.1	10.7	8.6	-	-
HCM Lane LOS	A	-	-	A	A	E	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	0	3.1	0.7	0.4	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	23	318	192	27	34	34
Future Vol, veh/h	23	318	192	27	34	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	3	2	2	2
Mvmt Flow	26	361	218	31	39	39

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	249	0	-	0	467	125
Stage 1	-	-	-	-	234	-
Stage 2	-	-	-	-	233	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1314	-	-	-	525	902
Stage 1	-	-	-	-	783	-
Stage 2	-	-	-	-	784	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1314	-	-	-	512	902
Mov Cap-2 Maneuver	-	-	-	-	512	-
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	784	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1314	-	-	-	653
HCM Lane V/C Ratio	0.02	-	-	-	0.118
HCM Control Delay (s)	7.8	0.1	-	-	11.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	316	23	21	174	18	20	10	14	21	10	26
Future Vol, veh/h	13	316	23	21	174	18	20	10	14	21	10	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	4	2	2	2	10	2	2	2
Mvmt Flow	15	359	26	24	198	20	23	11	16	24	11	30

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	218	0	0	385	0	0	555	668	193	471	671	109
Stage 1	-	-	-	-	-	-	402	402	-	256	256	-
Stage 2	-	-	-	-	-	-	153	266	-	215	415	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	7.1	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.4	3.52	4.02	3.32
Pot Cap-1 Maneuver	1349	-	-	1170	-	-	414	378	792	476	376	924
Stage 1	-	-	-	-	-	-	596	599	-	726	694	-
Stage 2	-	-	-	-	-	-	834	687	-	767	591	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1349	-	-	1170	-	-	380	364	792	443	362	924
Mov Cap-2 Maneuver	-	-	-	-	-	-	380	364	-	443	362	-
Stage 1	-	-	-	-	-	-	588	591	-	716	678	-
Stage 2	-	-	-	-	-	-	776	671	-	727	583	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.9	14	12.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	450	1349	-	-	1170	-	-	553
HCM Lane V/C Ratio	0.111	0.011	-	-	0.02	-	-	0.117
HCM Control Delay (s)	14	7.7	0	-	8.1	0.1	-	12.4
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0.4

MOVEMENT SUMMARY

Site: 1 [PM 2025 With Project Trips (Site Folder: General)]

Myra Road / Heritage Road / Pine Street Intersection
Site Category: Roundabout Intersection
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Myra Road														
3	L2	8	2.0	8	2.0	0.168	9.5	LOS A	0.9	23.3	0.37	0.36	0.37	35.7
8	T1	351	4.0	369	4.0	0.168	3.0	LOS A	0.9	24.0	0.36	0.36	0.36	34.0
18	R2	89	2.0	94	2.0	0.168	3.5	LOS A	0.9	24.0	0.35	0.37	0.35	30.8
Approach		448	3.6	472	3.6	0.168	3.2	LOS A	0.9	24.0	0.36	0.36	0.36	33.3
East: Pine Street														
1	L2	90	2.0	95	2.0	0.229	8.4	LOS A	0.9	22.7	0.43	0.52	0.43	31.4
6	T1	64	2.0	67	2.0	0.229	2.2	LOS A	0.9	22.7	0.43	0.52	0.43	32.3
16	R2	80	2.0	84	2.0	0.229	3.0	LOS A	0.9	22.7	0.43	0.52	0.43	30.1
Approach		234	2.0	246	2.0	0.229	4.9	LOS A	0.9	22.7	0.43	0.52	0.43	31.2
North: Myra Road														
7	L2	54	2.0	57	2.0	0.197	9.4	LOS A	1.1	28.3	0.36	0.41	0.36	32.2
4	T1	376	2.0	396	2.0	0.197	2.9	LOS A	1.2	29.3	0.35	0.39	0.35	33.8
14	R2	110	2.0	116	2.0	0.197	3.5	LOS A	1.2	29.3	0.34	0.36	0.34	34.4
Approach		540	2.0	568	2.0	0.197	3.7	LOS A	1.2	29.3	0.35	0.38	0.35	33.7
West: Heritage Road														
5	L2	80	2.0	84	2.0	0.161	11.5	LOS B	0.6	15.2	0.44	0.65	0.44	34.7
2	T1	55	2.0	58	2.0	0.161	4.8	LOS A	0.6	15.2	0.44	0.65	0.44	32.1
12	R2	24	2.0	25	2.0	0.161	5.0	LOS A	0.6	15.2	0.44	0.65	0.44	33.1
Approach		159	2.0	167	2.0	0.161	8.2	LOS A	0.6	15.2	0.44	0.65	0.44	33.5
All Vehicles		1381	2.5	1454	2.5	0.229	4.2	LOS A	1.2	29.3	0.37	0.43	0.37	33.1

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	188	145	76	143	0	147	2	104	2	3	3
Future Vol, veh/h	4	188	145	76	143	0	147	2	104	2	3	3
Conflicting Peds, #/hr	7	0	0	0	0	7	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	4	3	7	2	6	2	4	2	2	2
Mvmt Flow	4	198	153	80	151	0	155	2	109	2	3	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	158	0	0	351	0	0	598	601	276	657	677	159
Stage 1	-	-	-	-	-	-	283	283	-	318	318	-
Stage 2	-	-	-	-	-	-	315	318	-	339	359	-
Critical Hdwy	4.12	-	-	4.13	-	-	7.16	6.52	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.16	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.16	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.554	4.018	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1422	-	-	1202	-	-	408	414	758	378	375	886
Stage 1	-	-	-	-	-	-	715	677	-	693	654	-
Stage 2	-	-	-	-	-	-	688	654	-	676	627	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1413	-	-	1202	-	-	380	380	757	301	344	879
Mov Cap-2 Maneuver	-	-	-	-	-	-	380	380	-	301	344	-
Stage 1	-	-	-	-	-	-	712	674	-	685	602	-
Stage 2	-	-	-	-	-	-	632	602	-	574	624	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	2.8	21.6	13.6
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	478	1413	-	-	1202	-	-	426
HCM Lane V/C Ratio	0.557	0.003	-	-	0.067	-	-	0.02
HCM Control Delay (s)	21.6	7.6	0	-	8.2	0	-	13.6
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	3.4	0	-	-	0.2	-	-	0.1

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	0	6	65	0	80	0	359	68	101	390	0
Future Vol, veh/h	9	0	6	65	0	80	0	359	68	101	390	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	135	-	-	0	-	-	150	-	-	140	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	3	2	2	2	2
Mvmt Flow	10	0	7	71	0	87	0	390	74	110	424	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	839	1108	212	859	1071	232	424	0	0	464	0	0
Stage 1	644	644	-	427	427	-	-	-	-	-	-	-
Stage 2	195	464	-	432	644	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	259	209	793	250	219	770	1132	-	-	1094	-	-
Stage 1	428	466	-	576	584	-	-	-	-	-	-	-
Stage 2	788	562	-	572	466	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	212	188	793	229	197	770	1132	-	-	1094	-	-
Mov Cap-2 Maneuver	212	188	-	229	197	-	-	-	-	-	-	-
Stage 1	428	419	-	576	584	-	-	-	-	-	-	-
Stage 2	699	562	-	510	419	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.5	18.1	0	1.8
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1132	-	-	212	793	229	770	1094	-	-
HCM Lane V/C Ratio	-	-	-	0.046	0.008	0.309	0.113	0.1	-	-
HCM Control Delay (s)	0	-	-	22.8	9.6	27.6	10.3	8.7	-	-
HCM Lane LOS	A	-	-	C	A	D	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	1.3	0.4	0.3	-	-

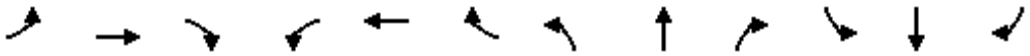
Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	180	0	41	179	103	0	7	1	71	8	1
Future Vol, veh/h	0	180	0	41	179	103	0	7	1	71	8	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	95	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	6	2	2
Mvmt Flow	0	196	0	45	195	112	0	8	1	77	9	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	307	0	0	196	0	0	542	593	196	542	537	251
Stage 1	-	-	-	-	-	-	196	196	-	341	341	-
Stage 2	-	-	-	-	-	-	346	397	-	201	196	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.16	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.16	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.16	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.554	4.018	3.318
Pot Cap-1 Maneuver	1254	-	-	1377	-	-	451	418	845	445	450	788
Stage 1	-	-	-	-	-	-	806	739	-	666	639	-
Stage 2	-	-	-	-	-	-	670	603	-	792	739	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1254	-	-	1377	-	-	433	404	845	427	435	788
Mov Cap-2 Maneuver	-	-	-	-	-	-	433	404	-	427	435	-
Stage 1	-	-	-	-	-	-	806	739	-	666	618	-
Stage 2	-	-	-	-	-	-	638	583	-	783	739	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1	13.5	15.5
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	432	1254	-	-	1377	-	-	430
HCM Lane V/C Ratio	0.02	-	-	-	0.032	-	-	0.202
HCM Control Delay (s)	13.5	0	-	-	7.7	-	-	15.5
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0.7



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	155	38	189	220	62	54	306	137	38	374	49
Future Volume (veh/h)	59	155	38	189	220	62	54	306	137	38	374	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1856	1856	1870	1856	1870	1870	1856	1870	1722	1870	1870
Adj Flow Rate, veh/h	62	163	0	199	232	0	57	322	144	40	394	52
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	3	3	2	3	2	2	3	2	12	2	2
Cap, veh/h	184	600		279	778		180	715	313	132	937	123
Arrive On Green	0.11	0.17	0.00	0.16	0.22	0.00	0.10	0.30	0.30	0.08	0.30	0.30
Sat Flow, veh/h	1739	3526	1572	1781	3526	1585	1781	2373	1037	1640	3157	414
Grp Volume(v), veh/h	62	163	0	199	232	0	57	237	229	40	221	225
Grp Sat Flow(s),veh/h/ln	1739	1763	1572	1781	1763	1585	1781	1763	1647	1640	1777	1794
Q Serve(g_s), s	2.0	2.5	0.0	6.6	3.4	0.0	1.8	6.7	7.0	1.4	6.2	6.2
Cycle Q Clear(g_c), s	2.0	2.5	0.0	6.6	3.4	0.0	1.8	6.7	7.0	1.4	6.2	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.63	1.00		0.23
Lane Grp Cap(c), veh/h	184	600		279	778		180	531	496	132	528	533
V/C Ratio(X)	0.34	0.27		0.71	0.30		0.32	0.45	0.46	0.30	0.42	0.42
Avail Cap(c_a), veh/h	422	1142		433	1142		433	1427	1334	398	1439	1452
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.6	22.3	0.0	24.7	20.1	0.0	25.8	17.4	17.5	26.8	17.4	17.5
Incr Delay (d2), s/veh	0.4	0.2	0.0	1.3	0.2	0.0	0.4	2.1	2.4	0.5	1.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.0	0.0	2.6	1.3	0.0	0.7	2.7	2.7	0.5	2.5	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.0	22.5	0.0	26.0	20.2	0.0	26.1	19.5	19.9	27.2	19.3	19.4
LnGrp LOS	C	C		C	C		C	B	B	C	B	B
Approach Vol, veh/h		225	A		431	A		523			486	
Approach Delay, s/veh		23.4			22.9			20.4			20.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	23.6	13.7	14.5	10.2	23.3	10.5	17.6
Change Period (Y+Rc), s	5.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	50.0	15.0	20.0	15.0	50.0	15.0	20.0
Max Q Clear Time (g_c+I1), s	3.4	9.0	8.6	4.5	3.8	8.2	4.0	5.4
Green Ext Time (p_c), s	0.0	8.1	0.1	0.6	0.0	7.5	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	21.4
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	38	291	442	34	32	29
Future Vol, veh/h	38	291	442	34	32	29
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	43	327	497	38	36	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	535	0	-	0	766	269
Stage 1	-	-	-	-	516	-
Stage 2	-	-	-	-	250	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1029	-	-	-	339	729
Stage 1	-	-	-	-	564	-
Stage 2	-	-	-	-	768	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1029	-	-	-	322	728
Mov Cap-2 Maneuver	-	-	-	-	322	-
Stage 1	-	-	-	-	535	-
Stage 2	-	-	-	-	768	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	14.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1029	-	-	-	438
HCM Lane V/C Ratio	0.041	-	-	-	0.156
HCM Control Delay (s)	8.7	0.2	-	-	14.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6

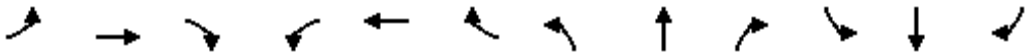
Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	29	277	17	17	409	32	48	6	36	19	7	18
Future Vol, veh/h	29	277	17	17	409	32	48	6	36	19	7	18
Conflicting Peds, #/hr	3	0	5	5	0	3	6	0	3	3	0	6
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	315	19	19	465	36	55	7	41	22	8	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	504	0	0	339	0	0	677	938	175	754	929	260
Stage 1	-	-	-	-	-	-	396	396	-	524	524	-
Stage 2	-	-	-	-	-	-	281	542	-	230	405	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1057	-	-	1217	-	-	339	263	838	298	266	739
Stage 1	-	-	-	-	-	-	601	602	-	504	528	-
Stage 2	-	-	-	-	-	-	702	518	-	752	597	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1054	-	-	1211	-	-	303	245	832	263	248	733
Mov Cap-2 Maneuver	-	-	-	-	-	-	303	245	-	263	248	-
Stage 1	-	-	-	-	-	-	575	576	-	483	515	-
Stage 2	-	-	-	-	-	-	653	505	-	677	571	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0.4	17.1	16.9
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	398	1054	-	-	1211	-	-	352
HCM Lane V/C Ratio	0.257	0.031	-	-	0.016	-	-	0.142
HCM Control Delay (s)	17.1	8.5	0.1	-	8	0.1	-	16.9
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1	0.1	-	-	0	-	-	0.5



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	251	171	30	281	19	171	265	39	25	223	140
Future Volume (veh/h)	87	251	171	30	281	19	171	265	39	25	223	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	264	180	32	296	20	180	279	41	26	235	147
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	233	405	342	229	356	297	505	1508	219	598	466	292
Arrive On Green	0.06	0.22	0.22	0.03	0.19	0.19	0.08	0.48	0.48	0.03	0.43	0.43
Sat Flow, veh/h	1781	1870	1581	1781	1870	1559	1781	3113	452	1781	1076	673
Grp Volume(v), veh/h	92	264	180	32	296	20	180	158	162	26	0	382
Grp Sat Flow(s),veh/h/ln	1781	1870	1581	1781	1870	1559	1781	1777	1788	1781	0	1748
Q Serve(g_s), s	3.3	10.3	8.1	1.1	12.2	0.8	4.4	4.0	4.1	0.6	0.0	12.7
Cycle Q Clear(g_c), s	3.3	10.3	8.1	1.1	12.2	0.8	4.4	4.0	4.1	0.6	0.0	12.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.25	1.00		0.38
Lane Grp Cap(c), veh/h	233	405	342	229	356	297	505	861	866	598	0	758
V/C Ratio(X)	0.39	0.65	0.53	0.14	0.83	0.07	0.36	0.18	0.19	0.04	0.00	0.50
Avail Cap(c_a), veh/h	293	498	421	335	498	415	528	861	866	711	0	758
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.9	28.6	27.7	23.7	31.1	26.5	11.8	11.7	11.7	9.8	0.0	16.4
Incr Delay (d2), s/veh	0.4	2.2	1.3	0.1	8.1	0.1	0.2	0.5	0.5	0.0	0.0	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	4.7	3.1	0.5	6.1	0.3	1.6	1.6	1.6	0.2	0.0	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.3	30.8	29.0	23.8	39.3	26.6	12.0	12.1	12.2	9.8	0.0	18.8
LnGrp LOS	C	C	C	C	D	C	B	B	B	A	A	B
Approach Vol, veh/h		536			348			500			408	
Approach Delay, s/veh		29.2			37.1			12.1			18.2	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	39.8	9.3	19.9	6.9	43.9	7.2	22.0
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	* 4.7	* 4.7	5.1	* 4.7	* 4.7
Max Green Setting (Gmax), s	* 7.3	24.9	* 7.3	* 21	* 7.3	24.9	* 7.3	* 21
Max Q Clear Time (g_c+I1), s	6.4	14.7	5.3	14.2	2.6	6.1	3.1	12.3
Green Ext Time (p_c), s	0.0	1.7	0.0	1.0	0.0	1.7	0.0	1.5

Intersection Summary	
HCM 6th Ctrl Delay	23.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	153	22	146	327	53	29	370	121	44	448	173
Future Volume (veh/h)	126	153	22	146	327	53	29	370	121	44	448	173
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1841	1870	1870	1870	1870	1856	1826	1870	1870	1870
Adj Flow Rate, veh/h	131	159	23	152	341	55	30	385	126	46	467	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	4	2	2	2	2	3	5	2	2	2
Cap, veh/h	183	424	61	196	429	69	82	781	252	111	1119	
Arrive On Green	0.10	0.27	0.27	0.11	0.27	0.27	0.05	0.30	0.30	0.06	0.31	0.00
Sat Flow, veh/h	1781	1598	231	1781	1571	253	1781	2619	846	1781	3554	1585
Grp Volume(v), veh/h	131	0	182	152	0	396	30	258	253	46	467	0
Grp Sat Flow(s),veh/h/ln	1781	0	1829	1781	0	1825	1781	1763	1702	1781	1777	1585
Q Serve(g_s), s	4.3	0.0	4.9	5.0	0.0	12.2	1.0	7.3	7.4	1.5	6.3	0.0
Cycle Q Clear(g_c), s	4.3	0.0	4.9	5.0	0.0	12.2	1.0	7.3	7.4	1.5	6.3	0.0
Prop In Lane	1.00		0.13	1.00		0.14	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	183	0	486	196	0	498	82	526	508	111	1119	
V/C Ratio(X)	0.72	0.00	0.37	0.78	0.00	0.80	0.37	0.49	0.50	0.41	0.42	
Avail Cap(c_a), veh/h	499	0	1056	499	0	1053	294	872	842	294	1759	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.3	0.0	18.2	26.3	0.0	20.5	28.1	17.5	17.5	27.4	16.4	0.0
Incr Delay (d2), s/veh	3.9	0.0	0.5	4.9	0.0	2.9	1.0	2.6	2.7	1.8	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	2.0	2.2	0.0	5.0	0.4	3.0	3.0	0.7	2.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.2	0.0	18.6	31.1	0.0	23.4	29.1	20.0	20.3	29.2	17.3	0.0
LnGrp LOS	C	A	B	C	A	C	C	C	C	C	B	
Approach Vol, veh/h		313			548			541			513	A
Approach Delay, s/veh		23.5			25.6			20.7			18.4	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.3	23.6	9.7	21.0	7.3	22.6	10.2	20.6
Change Period (Y+Rc), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Max Green Setting (Gmax), s	10.8	30.0	17.0	35.0	10.0	30.0	17.0	35.0
Max Q Clear Time (g_c+I1), s	13.3	8.3	6.3	14.2	3.5	9.4	7.0	6.9
Green Ext Time (p_c), s	0.0	6.6	0.2	2.3	0.0	6.8	0.2	1.1

Intersection Summary	
HCM 6th Ctrl Delay	21.9
HCM 6th LOS	C

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	55	59	73	466	586	30
Future Volume (veh/h)	55	59	73	466	586	30
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1870	1870	1811	1870	1870
Adj Flow Rate, veh/h	60	64	79	507	637	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	2	2	6	2	2
Cap, veh/h	316	147	130	2271	1636	85
Arrive On Green	0.09	0.09	0.07	0.66	0.48	0.48
Sat Flow, veh/h	3401	1585	1781	3532	3531	178
Grp Volume(v), veh/h	60	64	79	507	329	341
Grp Sat Flow(s),veh/h/ln	1700	1585	1781	1721	1777	1838
Q Serve(g_s), s	0.7	1.5	1.7	2.4	4.8	4.8
Cycle Q Clear(g_c), s	0.7	1.5	1.7	2.4	4.8	4.8
Prop In Lane	1.00	1.00	1.00			0.10
Lane Grp Cap(c), veh/h	316	147	130	2271	845	875
V/C Ratio(X)	0.19	0.43	0.61	0.22	0.39	0.39
Avail Cap(c_a), veh/h	1934	901	661	4254	2197	2273
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.9	17.3	18.2	2.7	6.8	6.8
Incr Delay (d2), s/veh	0.1	0.8	1.7	0.2	1.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.7	0.3	1.4	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.0	18.1	19.9	2.9	7.9	7.9
LnGrp LOS	B	B	B	A	A	A
Approach Vol, veh/h	124			586	670	
Approach Delay, s/veh	17.6			5.2	7.9	
Approach LOS	B			A	A	

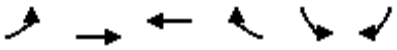
Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	31.7		8.8	7.4	24.2
Change Period (Y+Rc), s	5.0		5.0	4.5	5.0
Max Green Setting (Gmax), s	50.0		23.0	15.0	50.0
Max Q Clear Time (g_c+I1), s	4.4		3.5	3.7	6.8
Green Ext Time (p_c), s	9.6		0.2	0.1	12.4

Intersection Summary	
HCM 6th Ctrl Delay	7.6
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	168	14	19	184	163	22	258	14	104	365	176
Future Volume (veh/h)	118	168	14	19	184	163	22	258	14	104	365	176
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1856	1870	1856	1870	1870	1856	1870
Adj Flow Rate, veh/h	124	177	15	20	194	172	23	272	15	109	384	185
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	3	2	3	2	2	3	2
Cap, veh/h	380	450	447	369	314	429	434	1047	57	570	1312	764
Arrive On Green	0.11	0.24	0.24	0.04	0.17	0.17	0.04	0.31	0.31	0.11	0.37	0.37
Sat Flow, veh/h	1781	1870	1579	1781	1870	1564	1781	3398	187	1781	3526	1585
Grp Volume(v), veh/h	124	177	15	20	194	172	23	140	147	109	384	185
Grp Sat Flow(s),veh/h/ln	1781	1870	1579	1781	1870	1564	1781	1763	1822	1781	1763	1585
Q Serve(g_s), s	3.5	5.2	0.4	0.5	6.3	5.8	0.5	3.9	3.9	2.5	5.0	4.4
Cycle Q Clear(g_c), s	3.5	5.2	0.4	0.5	6.3	5.8	0.5	3.9	3.9	2.5	5.0	4.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	380	450	447	369	314	429	434	543	561	570	1312	764
V/C Ratio(X)	0.33	0.39	0.03	0.05	0.62	0.40	0.05	0.26	0.26	0.19	0.29	0.24
Avail Cap(c_a), veh/h	732	1152	1039	851	864	889	908	950	982	930	1900	1029
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.5	20.7	16.9	17.3	25.1	19.2	11.5	16.9	16.9	12.0	14.4	9.9
Incr Delay (d2), s/veh	0.5	0.4	0.0	0.1	1.5	0.4	0.1	0.2	0.2	0.2	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	2.1	0.2	0.2	2.7	2.0	0.2	1.5	1.5	0.9	1.8	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.0	21.1	16.9	17.4	26.5	19.7	11.5	17.1	17.1	12.2	14.5	10.0
LnGrp LOS	B	C	B	B	C	B	B	B	B	B	B	A
Approach Vol, veh/h		316			386			310			678	
Approach Delay, s/veh		20.1			23.0			16.7			12.9	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	25.0	7.4	20.6	7.7	29.2	12.1	15.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	20.0	35.0	20.0	40.0	20.0	35.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	14.5	5.9	2.5	7.2	2.5	7.0	5.5	8.3
Green Ext Time (p_c), s	0.2	1.3	0.0	0.8	0.0	2.5	0.2	1.2

Intersection Summary	
HCM 6th Ctrl Delay	17.2
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	249	574	671	45	49	349
Future Volume (veh/h)	249	574	671	45	49	349
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1767	1870	1870	1870	1870	1796
Adj Flow Rate, veh/h	257	592	692	46	51	360
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	9	2	2	2	2	7
Cap, veh/h	263	2546	1731	772	283	425
Arrive On Green	0.16	0.72	0.49	0.49	0.16	0.16
Sat Flow, veh/h	1682	3647	3647	1585	1781	2679
Grp Volume(v), veh/h	257	592	692	46	51	360
Grp Sat Flow(s),veh/h/ln	1682	1777	1777	1585	1781	1340
Q Serve(g_s), s	14.6	5.4	11.9	1.5	2.4	12.5
Cycle Q Clear(g_c), s	14.6	5.4	11.9	1.5	2.4	12.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	263	2546	1731	772	283	425
V/C Ratio(X)	0.98	0.23	0.40	0.06	0.18	0.85
Avail Cap(c_a), veh/h	263	2546	1731	772	464	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.97	0.97
Uniform Delay (d), s/veh	40.3	4.6	15.7	13.0	35.0	39.2
Incr Delay (d2), s/veh	48.9	0.2	0.7	0.1	0.1	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	1.3	4.3	0.5	1.0	9.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	89.3	4.8	16.4	13.1	35.1	41.7
LnGrp LOS	F	A	B	B	D	D
Approach Vol, veh/h		849	738		411	
Approach Delay, s/veh		30.4	16.2		40.8	
Approach LOS		C	B		D	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	75.8		20.2	22.0	53.8
Change Period (Y+Rc), s	7.0		5.0	7.0	7.0
Max Green Setting (Gmax), s	59.0		25.0	15.0	37.0
Max Q Clear Time (g_c+I1), s	7.4		14.5	16.6	13.9
Green Ext Time (p_c), s	3.8		0.7	0.0	4.3

Intersection Summary	
HCM 6th Ctrl Delay	27.3
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	1	0	0	0	23	360	0	0	362	4
Future Vol, veh/h	0	0	1	0	0	0	23	360	0	0	362	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	135	-	-	0	-	-	150	-	-	140	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	15	4	0	2	8	2
Mvmt Flow	0	0	1	0	0	0	26	409	0	0	411	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	671	875	208	667	877	205	416	0	0	409	0	0
Stage 1	414	414	-	461	461	-	-	-	-	-	-	-
Stage 2	257	461	-	206	416	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.4	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.35	-	-	2.22	-	-
Pot Cap-1 Maneuver	342	286	798	344	285	802	1052	-	-	1146	-	-
Stage 1	586	591	-	550	564	-	-	-	-	-	-	-
Stage 2	725	564	-	777	590	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	336	279	798	337	278	802	1052	-	-	1146	-	-
Mov Cap-2 Maneuver	336	279	-	337	278	-	-	-	-	-	-	-
Stage 1	571	591	-	536	550	-	-	-	-	-	-	-
Stage 2	707	550	-	776	590	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	0	0.5	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1052	-	-	-	798	-	-	1146	-	-
HCM Lane V/C Ratio	0.025	-	-	-	0.001	-	-	-	-	-
HCM Control Delay (s)	8.5	-	-	0	9.5	0	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	0	-	-	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	361	199	10	11	1
Future Vol, veh/h	7	361	199	10	11	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	3	2	2	2
Mvmt Flow	8	410	226	11	13	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	237	0	-	0	453	119
Stage 1	-	-	-	-	232	-
Stage 2	-	-	-	-	221	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1327	-	-	-	535	910
Stage 1	-	-	-	-	785	-
Stage 2	-	-	-	-	795	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1327	-	-	-	531	910
Mov Cap-2 Maneuver	-	-	-	-	531	-
Stage 1	-	-	-	-	779	-
Stage 2	-	-	-	-	795	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1327	-	-	-	550
HCM Lane V/C Ratio	0.006	-	-	-	0.025
HCM Control Delay (s)	7.7	0	-	-	11.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	344	21	24	184	10	18	5	16	1	4	6
Future Vol, veh/h	7	344	21	24	184	10	18	5	16	1	4	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	4	2	2	2	10	2	2	2
Mvmt Flow	8	391	24	27	209	11	20	6	18	1	5	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	220	0	0	415	0	0	580	693	208	484	700	110
Stage 1	-	-	-	-	-	-	419	419	-	269	269	-
Stage 2	-	-	-	-	-	-	161	274	-	215	431	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	7.1	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.4	3.52	4.02	3.32
Pot Cap-1 Maneuver	1346	-	-	1140	-	-	398	365	774	466	362	922
Stage 1	-	-	-	-	-	-	582	588	-	713	685	-
Stage 2	-	-	-	-	-	-	825	682	-	767	581	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1346	-	-	1140	-	-	381	352	774	438	349	922
Mov Cap-2 Maneuver	-	-	-	-	-	-	381	352	-	438	349	-
Stage 1	-	-	-	-	-	-	577	583	-	707	667	-
Stage 2	-	-	-	-	-	-	791	664	-	736	576	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1	13.4	11.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	475	1346	-	-	1140	-	-	543
HCM Lane V/C Ratio	0.093	0.006	-	-	0.024	-	-	0.023
HCM Control Delay (s)	13.4	7.7	0	-	8.2	0.1	-	11.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.1

MOVEMENT SUMMARY

Site: 1 [PM 2040 Without Project]

Myra Road / Heritage Road / Pine Street Intersection
Site Category: Roundabout Intersection
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Myra Road												
3	L2	10	2.0	0.168	9.6	LOS A	0.9	23.3	0.39	0.37	0.39	35.6
8	T1	368	4.0	0.168	3.1	LOS A	0.9	24.0	0.38	0.37	0.38	33.9
18	R2	87	2.0	0.168	3.6	LOS A	0.9	24.0	0.36	0.37	0.36	30.7
Approach		465	3.6	0.168	3.3	LOS A	0.9	24.0	0.38	0.37	0.38	33.3
East: Pine Street												
1	L2	81	2.0	0.232	8.4	LOS A	0.9	23.1	0.44	0.51	0.44	31.5
6	T1	74	2.0	0.232	2.2	LOS A	0.9	23.1	0.44	0.51	0.44	32.4
16	R2	93	2.0	0.232	3.0	LOS A	0.9	23.1	0.44	0.51	0.44	30.2
Approach		248	2.0	0.232	4.5	LOS A	0.9	23.1	0.44	0.51	0.44	31.3
North: Myra Road												
7	L2	62	2.0	0.199	9.4	LOS A	1.1	28.5	0.35	0.42	0.35	32.2
4	T1	384	2.0	0.199	2.9	LOS A	1.2	29.4	0.34	0.39	0.34	33.8
14	R2	128	2.0	0.199	3.4	LOS A	1.2	29.4	0.33	0.36	0.33	34.4
Approach		574	2.0	0.199	3.7	LOS A	1.2	29.4	0.34	0.39	0.34	33.7
West: Heritage Road												
5	L2	93	2.0	0.175	11.4	LOS B	0.7	16.7	0.43	0.65	0.43	34.7
2	T1	63	2.0	0.175	4.8	LOS A	0.7	16.7	0.43	0.65	0.43	32.1
12	R2	28	2.0	0.175	5.0	LOS A	0.7	16.7	0.43	0.65	0.43	33.1
Approach		184	2.0	0.175	8.2	LOS A	0.7	16.7	0.43	0.65	0.43	33.5
All Vehicles		1471	2.5	0.232	4.3	LOS A	1.2	29.4	0.38	0.44	0.38	33.1

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection	
Int Delay, s/veh	11.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	209	168	88	155	0	171	2	121	2	4	4
Future Vol, veh/h	5	209	168	88	155	0	171	2	121	2	4	4
Conflicting Peds, #/hr	7	0	0	0	0	7	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	4	3	7	2	6	2	4	2	2	2
Mvmt Flow	5	220	177	93	163	0	180	2	127	2	4	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	170	0	0	397	0	0	673	675	310	740	763	171
Stage 1	-	-	-	-	-	-	319	319	-	356	356	-
Stage 2	-	-	-	-	-	-	354	356	-	384	407	-
Critical Hdwy	4.12	-	-	4.13	-	-	7.16	6.52	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.16	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.16	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.554	4.018	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1407	-	-	1156	-	-	364	376	725	333	334	873
Stage 1	-	-	-	-	-	-	684	653	-	661	629	-
Stage 2	-	-	-	-	-	-	655	629	-	639	597	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1398	-	-	1156	-	-	333	339	724	252	301	866
Mov Cap-2 Maneuver	-	-	-	-	-	-	333	339	-	252	301	-
Stage 1	-	-	-	-	-	-	681	650	-	653	570	-
Stage 2	-	-	-	-	-	-	590	570	-	522	594	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	3	32.5	14.6
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	428	1398	-	-	1156	-	-	387
HCM Lane V/C Ratio	0.723	0.004	-	-	0.08	-	-	0.027
HCM Control Delay (s)	32.5	7.6	0	-	8.4	0	-	14.6
HCM Lane LOS	D	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	5.7	0	-	-	0.3	-	-	0.1

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	0	7	0	0	0	0	454	0	0	493	0
Future Vol, veh/h	11	0	7	0	0	0	0	454	0	0	493	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	135	-	-	0	-	-	150	-	-	140	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	3	2	2	2	2
Mvmt Flow	12	0	8	0	0	0	0	493	0	0	536	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	783	1029	268	761	1029	247	536	0	0	493	0	0
Stage 1	536	536	-	493	493	-	-	-	-	-	-	-
Stage 2	247	493	-	268	536	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	284	232	730	295	232	753	1028	-	-	1067	-	-
Stage 1	496	522	-	526	545	-	-	-	-	-	-	-
Stage 2	735	545	-	714	522	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	284	232	730	292	232	753	1028	-	-	1067	-	-
Mov Cap-2 Maneuver	284	232	-	292	232	-	-	-	-	-	-	-
Stage 1	496	522	-	526	545	-	-	-	-	-	-	-
Stage 2	735	545	-	707	522	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15	0	0	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1028	-	-	284	730	-	-	1067	-	-
HCM Lane V/C Ratio	-	-	-	0.042	0.01	-	-	-	-	-
HCM Control Delay (s)	0	-	-	18.2	10	0	0	0	-	-
HCM Lane LOS	A	-	-	C	B	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	-	-	0	-	-

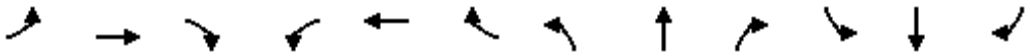
Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	184	0	48	190	111	0	9	1	70	10	1
Future Vol, veh/h	0	184	0	48	190	111	0	9	1	70	10	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	95	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	6	2	2
Mvmt Flow	0	200	0	52	207	121	0	10	1	76	11	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	328	0	0	200	0	0	578	632	200	578	572	268
Stage 1	-	-	-	-	-	-	200	200	-	372	372	-
Stage 2	-	-	-	-	-	-	378	432	-	206	200	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.16	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.16	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.16	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.554	4.018	3.318
Pot Cap-1 Maneuver	1232	-	-	1372	-	-	427	398	841	421	430	771
Stage 1	-	-	-	-	-	-	802	736	-	640	619	-
Stage 2	-	-	-	-	-	-	644	582	-	787	736	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1232	-	-	1372	-	-	406	383	841	400	414	771
Mov Cap-2 Maneuver	-	-	-	-	-	-	406	383	-	400	414	-
Stage 1	-	-	-	-	-	-	802	736	-	640	595	-
Stage 2	-	-	-	-	-	-	607	560	-	776	736	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.1	14.1	16.4
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	405	1232	-	-	1372	-	-	404
HCM Lane V/C Ratio	0.027	-	-	-	0.038	-	-	0.218
HCM Control Delay (s)	14.1	0	-	-	7.7	-	-	16.4
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0.8



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	159	44	190	243	72	62	329	111	44	412	44
Future Volume (veh/h)	52	159	44	190	243	72	62	329	111	44	412	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1856	1856	1870	1856	1870	1870	1856	1870	1722	1870	1870
Adj Flow Rate, veh/h	55	167	0	200	256	0	65	346	117	46	434	46
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	3	3	2	3	2	2	3	2	12	2	2
Cap, veh/h	171	595		277	796		193	772	257	145	955	101
Arrive On Green	0.10	0.17	0.00	0.16	0.23	0.00	0.11	0.30	0.30	0.09	0.29	0.29
Sat Flow, veh/h	1739	3526	1572	1781	3526	1585	1781	2586	859	1640	3242	342
Grp Volume(v), veh/h	55	167	0	200	256	0	65	234	229	46	237	243
Grp Sat Flow(s),veh/h/ln	1739	1763	1572	1781	1763	1585	1781	1763	1683	1640	1777	1807
Q Serve(g_s), s	1.8	2.6	0.0	6.7	3.8	0.0	2.1	6.7	6.9	1.6	6.8	6.8
Cycle Q Clear(g_c), s	1.8	2.6	0.0	6.7	3.8	0.0	2.1	6.7	6.9	1.6	6.8	6.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.51	1.00		0.19
Lane Grp Cap(c), veh/h	171	595		277	796		193	526	503	145	523	532
V/C Ratio(X)	0.32	0.28		0.72	0.32		0.34	0.44	0.46	0.32	0.45	0.46
Avail Cap(c_a), veh/h	419	1132		429	1132		429	1415	1351	395	1426	1451
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.1	22.6	0.0	25.0	20.1	0.0	25.7	17.7	17.7	26.6	17.9	17.9
Incr Delay (d2), s/veh	0.4	0.2	0.0	1.3	0.2	0.0	0.4	2.1	2.3	0.5	2.2	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.0	0.0	2.7	1.4	0.0	0.9	2.7	2.7	0.6	2.8	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.5	22.8	0.0	26.4	20.3	0.0	26.1	19.8	20.1	27.1	20.1	20.1
LnGrp LOS	C	C		C	C		C	B	C	C	C	C
Approach Vol, veh/h		222	A		456	A		528			526	
Approach Delay, s/veh		23.7			23.0			20.7			20.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	23.6	13.7	14.5	10.8	23.3	10.1	18.1
Change Period (Y+Rc), s	5.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	50.0	15.0	20.0	15.0	50.0	15.0	20.0
Max Q Clear Time (g_c+I1), s	3.6	8.9	8.7	4.6	4.1	8.8	3.8	5.8
Green Ext Time (p_c), s	0.0	8.0	0.1	0.6	0.0	8.2	0.0	1.0

Intersection Summary	
HCM 6th Ctrl Delay	21.7
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	309	497	15	20	9
Future Vol, veh/h	5	309	497	15	20	9
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	347	558	17	22	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	575	0	-	0	753	289
Stage 1	-	-	-	-	567	-
Stage 2	-	-	-	-	186	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	994	-	-	-	346	708
Stage 1	-	-	-	-	531	-
Stage 2	-	-	-	-	827	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	994	-	-	-	344	707
Mov Cap-2 Maneuver	-	-	-	-	344	-
Stage 1	-	-	-	-	527	-
Stage 2	-	-	-	-	827	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	14.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	994	-	-	-	409
HCM Lane V/C Ratio	0.006	-	-	-	0.08
HCM Control Delay (s)	8.6	0	-	-	14.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

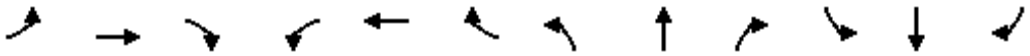
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	307	16	20	455	11	51	0	41	6	4	5
Future Vol, veh/h	5	307	16	20	455	11	51	0	41	6	4	5
Conflicting Peds, #/hr	3	0	5	5	0	3	6	0	3	3	0	6
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	349	18	23	517	13	58	0	47	7	5	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	533	0	0	372	0	0	688	954	192	763	957	274
Stage 1	-	-	-	-	-	-	375	375	-	573	573	-
Stage 2	-	-	-	-	-	-	313	579	-	190	384	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1031	-	-	1183	-	-	333	257	817	294	256	724
Stage 1	-	-	-	-	-	-	618	615	-	472	502	-
Stage 2	-	-	-	-	-	-	672	499	-	794	610	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1028	-	-	1177	-	-	314	246	811	268	245	718
Mov Cap-2 Maneuver	-	-	-	-	-	-	314	246	-	268	245	-
Stage 1	-	-	-	-	-	-	611	608	-	467	486	-
Stage 2	-	-	-	-	-	-	638	484	-	741	603	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.4	16	16.6
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	432	1028	-	-	1177	-	-	328
HCM Lane V/C Ratio	0.242	0.006	-	-	0.019	-	-	0.052
HCM Control Delay (s)	16	8.5	0	-	8.1	0.1	-	16.6
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.9	0	-	-	0.1	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	271	189	35	292	22	187	307	45	29	259	162
Future Volume (veh/h)	101	271	189	35	292	22	187	307	45	29	259	162
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	106	285	199	37	307	23	197	323	47	31	273	171
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	246	423	357	232	367	306	445	1458	210	556	444	278
Arrive On Green	0.07	0.23	0.23	0.04	0.20	0.20	0.09	0.47	0.47	0.03	0.41	0.41
Sat Flow, veh/h	1781	1870	1581	1781	1870	1559	1781	3117	449	1781	1075	673
Grp Volume(v), veh/h	106	285	199	37	307	23	197	183	187	31	0	444
Grp Sat Flow(s),veh/h/ln	1781	1870	1581	1781	1870	1559	1781	1777	1789	1781	0	1748
Q Serve(g_s), s	3.7	11.1	8.9	1.3	12.6	1.0	5.0	4.9	5.0	0.7	0.0	16.0
Cycle Q Clear(g_c), s	3.7	11.1	8.9	1.3	12.6	1.0	5.0	4.9	5.0	0.7	0.0	16.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.25	1.00		0.39
Lane Grp Cap(c), veh/h	246	423	357	232	367	306	445	831	837	556	0	721
V/C Ratio(X)	0.43	0.67	0.56	0.16	0.84	0.08	0.44	0.22	0.22	0.06	0.00	0.62
Avail Cap(c_a), veh/h	293	498	421	332	498	415	454	831	837	663	0	721
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.3	28.3	27.4	23.1	30.9	26.2	13.3	12.6	12.7	10.4	0.0	18.5
Incr Delay (d2), s/veh	0.4	2.8	1.4	0.1	9.0	0.1	0.3	0.6	0.6	0.0	0.0	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	5.1	3.4	0.5	6.4	0.4	1.8	2.0	2.0	0.3	0.0	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.8	31.1	28.8	23.2	39.9	26.3	13.6	13.2	13.3	10.4	0.0	22.4
LnGrp LOS	C	C	C	C	D	C	B	B	B	B	A	C
Approach Vol, veh/h		590			367			567			475	
Approach Delay, s/veh		29.2			37.4			13.4			21.6	
Approach LOS		C			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	38.1	9.9	20.4	7.2	42.5	7.5	22.8
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	* 4.7	* 4.7	5.1	* 4.7	* 4.7
Max Green Setting (Gmax), s	* 7.3	24.9	* 7.3	* 21	* 7.3	24.9	* 7.3	* 21
Max Q Clear Time (g_c+I1), s	7.0	18.0	5.7	14.6	2.7	7.0	3.3	13.1
Green Ext Time (p_c), s	0.0	1.6	0.0	1.0	0.0	2.0	0.0	1.5

Intersection Summary	
HCM 6th Ctrl Delay	24.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	178	26	170	379	61	34	393	140	51	494	176
Future Volume (veh/h)	110	178	26	170	379	61	34	393	140	51	494	176
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1841	1870	1870	1870	1870	1856	1826	1870	1870	1870
Adj Flow Rate, veh/h	115	185	27	177	395	64	35	409	146	53	515	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	4	2	2	2	2	3	5	2	2	2
Cap, veh/h	169	440	64	224	480	78	90	721	255	119	1061	
Arrive On Green	0.10	0.28	0.28	0.13	0.31	0.31	0.05	0.28	0.28	0.07	0.30	0.00
Sat Flow, veh/h	1781	1596	233	1781	1570	254	1781	2554	901	1781	3554	1585
Grp Volume(v), veh/h	115	0	212	177	0	459	35	281	274	53	515	0
Grp Sat Flow(s),veh/h/ln	1781	0	1828	1781	0	1825	1781	1763	1692	1781	1777	1585
Q Serve(g_s), s	4.0	0.0	6.1	6.2	0.0	14.9	1.2	8.7	8.9	1.8	7.6	0.0
Cycle Q Clear(g_c), s	4.0	0.0	6.1	6.2	0.0	14.9	1.2	8.7	8.9	1.8	7.6	0.0
Prop In Lane	1.00		0.13	1.00		0.14	1.00		0.53	1.00		1.00
Lane Grp Cap(c), veh/h	169	0	504	224	0	558	90	498	478	119	1061	
V/C Ratio(X)	0.68	0.00	0.42	0.79	0.00	0.82	0.39	0.56	0.57	0.45	0.49	
Avail Cap(c_a), veh/h	473	0	999	473	0	997	278	826	792	278	1664	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	28.0	0.0	19.0	27.2	0.0	20.6	29.4	19.6	19.7	28.8	18.4	0.0
Incr Delay (d2), s/veh	3.5	0.0	0.6	4.7	0.0	3.1	1.0	3.6	3.9	1.9	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	2.5	2.7	0.0	6.1	0.5	3.7	3.7	0.8	3.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.5	0.0	19.6	31.9	0.0	23.7	30.5	23.2	23.6	30.7	19.7	0.0
LnGrp LOS	C	A	B	C	A	C	C	C	C	C	B	
Approach Vol, veh/h		327			636			590			568	A
Approach Delay, s/veh		23.8			26.0			23.8			20.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	23.6	9.6	24.1	7.8	22.6	11.5	22.2
Change Period (Y+Rc), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Max Green Setting (Gmax), s	10.0	30.0	17.0	35.0	10.0	30.0	17.0	35.0
Max Q Clear Time (g_c+I1), s	3.2	9.6	6.0	16.9	3.8	10.9	8.2	8.1
Green Ext Time (p_c), s	0.0	7.1	0.1	2.7	0.0	7.1	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	23.6
HCM 6th LOS	C

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	39	68	84	528	672	17
Future Volume (veh/h)	39	68	84	528	672	17
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1870	1870	1811	1870	1870
Adj Flow Rate, veh/h	42	74	91	574	730	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	2	2	6	2	2
Cap, veh/h	295	138	137	2349	1780	44
Arrive On Green	0.09	0.09	0.08	0.68	0.50	0.50
Sat Flow, veh/h	3401	1585	1781	3532	3638	87
Grp Volume(v), veh/h	42	74	91	574	366	382
Grp Sat Flow(s),veh/h/ln	1700	1585	1781	1721	1777	1855
Q Serve(g_s), s	0.5	1.9	2.2	2.8	5.6	5.6
Cycle Q Clear(g_c), s	0.5	1.9	2.2	2.8	5.6	5.6
Prop In Lane	1.00	1.00	1.00			0.05
Lane Grp Cap(c), veh/h	295	138	137	2349	893	932
V/C Ratio(X)	0.14	0.54	0.67	0.24	0.41	0.41
Avail Cap(c_a), veh/h	1803	840	616	3965	2048	2137
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.3	19.0	19.5	2.6	6.8	6.8
Incr Delay (d2), s/veh	0.1	1.2	2.1	0.2	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.8	0.8	0.3	1.6	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.4	20.2	21.6	2.8	7.9	7.8
LnGrp LOS	B	C	C	A	A	A
Approach Vol, veh/h	116			665	748	
Approach Delay, s/veh	19.5			5.4	7.8	
Approach LOS	B			A	A	

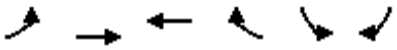
Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	34.6		8.8	7.8	26.8
Change Period (Y+Rc), s	5.0		5.0	4.5	5.0
Max Green Setting (Gmax), s	50.0		23.0	15.0	50.0
Max Q Clear Time (g_c+I1), s	4.8		3.9	4.2	7.6
Green Ext Time (p_c), s	11.1		0.2	0.1	14.2

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	195	16	22	214	189	26	287	16	121	416	204
Future Volume (veh/h)	137	195	16	22	214	189	26	287	16	121	416	204
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1856	1870	1856	1870	1870	1856	1870
Adj Flow Rate, veh/h	144	205	17	23	225	199	27	302	17	127	438	215
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	3	2	3	2	2	3	2
Cap, veh/h	370	463	466	362	332	449	404	1021	57	548	1278	752
Arrive On Green	0.11	0.25	0.25	0.04	0.18	0.18	0.05	0.30	0.30	0.11	0.36	0.36
Sat Flow, veh/h	1781	1870	1579	1781	1870	1565	1781	3394	190	1781	3526	1585
Grp Volume(v), veh/h	144	205	17	23	225	199	27	156	163	127	438	215
Grp Sat Flow(s),veh/h/ln	1781	1870	1579	1781	1870	1565	1781	1763	1821	1781	1763	1585
Q Serve(g_s), s	4.2	6.2	0.5	0.6	7.5	6.9	0.6	4.5	4.6	3.0	6.0	5.5
Cycle Q Clear(g_c), s	4.2	6.2	0.5	0.6	7.5	6.9	0.6	4.5	4.6	3.0	6.0	5.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	370	463	466	362	332	449	404	530	548	548	1278	752
V/C Ratio(X)	0.39	0.44	0.04	0.06	0.68	0.44	0.07	0.29	0.30	0.23	0.34	0.29
Avail Cap(c_a), veh/h	707	1125	1025	824	844	877	856	928	959	891	1856	1012
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.8	21.1	16.7	17.3	25.6	19.4	12.0	17.8	17.8	12.6	15.4	10.6
Incr Delay (d2), s/veh	0.7	0.5	0.0	0.1	1.8	0.5	0.1	0.2	0.2	0.2	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	2.5	0.2	0.2	3.3	2.4	0.2	1.7	1.8	1.1	2.2	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.4	21.6	16.7	17.4	27.4	19.9	12.1	18.1	18.1	12.9	15.5	10.8
LnGrp LOS	B	C	B	B	C	B	B	B	B	B	B	B
Approach Vol, veh/h		366			447			346			780	
Approach Delay, s/veh		20.5			23.5			17.6			13.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	25.0	7.8	21.5	8.1	29.1	12.4	16.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	20.0	35.0	20.0	40.0	20.0	35.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	7.5	6.6	2.6	8.2	2.6	8.0	6.2	9.5
Green Ext Time (p_c), s	0.3	1.5	0.0	1.0	0.0	2.9	0.3	1.4

Intersection Summary	
HCM 6th Ctrl Delay	18.0
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	276	666	778	52	57	397
Future Volume (veh/h)	276	666	778	52	57	397
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1767	1870	1870	1870	1870	1796
Adj Flow Rate, veh/h	285	687	802	54	59	409
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	9	2	2	2	2	7
Cap, veh/h	263	2481	1666	743	315	474
Arrive On Green	0.16	0.70	0.47	0.47	0.18	0.18
Sat Flow, veh/h	1682	3647	3647	1585	1781	2679
Grp Volume(v), veh/h	285	687	802	54	59	409
Grp Sat Flow(s),veh/h/ln	1682	1777	1777	1585	1781	1340
Q Serve(g_s), s	15.0	6.9	14.9	1.8	2.7	14.2
Cycle Q Clear(g_c), s	15.0	6.9	14.9	1.8	2.7	14.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	263	2481	1666	743	315	474
V/C Ratio(X)	1.08	0.28	0.48	0.07	0.19	0.86
Avail Cap(c_a), veh/h	263	2481	1666	743	464	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.96	0.96
Uniform Delay (d), s/veh	40.5	5.4	17.5	14.0	33.6	38.4
Incr Delay (d2), s/veh	79.7	0.3	1.0	0.2	0.1	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.8	5.5	0.6	1.2	10.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	120.2	5.7	18.5	14.2	33.7	43.4
LnGrp LOS	F	A	B	B	C	D
Approach Vol, veh/h		972	856		468	
Approach Delay, s/veh		39.3	18.2		42.2	
Approach LOS		D	B		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		74.0		22.0	22.0	52.0
Change Period (Y+Rc), s		7.0		5.0	7.0	7.0
Max Green Setting (Gmax), s		59.0		25.0	15.0	37.0
Max Q Clear Time (g_c+I1), s		8.9		16.2	17.0	16.9
Green Ext Time (p_c), s		4.5		0.8	0.0	4.9

Intersection Summary	
HCM 6th Ctrl Delay	32.0
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	1	115	0	139	23	303	118	128	305	4
Future Vol, veh/h	0	0	1	115	0	139	23	303	118	128	305	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	135	-	-	0	-	-	150	-	-	140	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	15	4	0	2	8	2
Mvmt Flow	0	0	1	131	0	158	26	344	134	145	347	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	864	1170	176	927	1105	239	352	0	0	478	0	0
Stage 1	640	640	-	463	463	-	-	-	-	-	-	-
Stage 2	224	530	-	464	642	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.4	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.35	-	-	2.22	-	-
Pot Cap-1 Maneuver	248	192	837	223	209	762	1115	-	-	1081	-	-
Stage 1	430	468	-	548	562	-	-	-	-	-	-	-
Stage 2	758	525	-	548	467	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	173	162	837	196	177	762	1115	-	-	1081	-	-
Mov Cap-2 Maneuver	173	162	-	196	177	-	-	-	-	-	-	-
Stage 1	420	405	-	535	549	-	-	-	-	-	-	-
Stage 2	587	513	-	474	404	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	30.4	0.4	2.6
HCM LOS	A	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1115	-	-	-	837	196	762	1081	-	-
HCM Lane V/C Ratio	0.023	-	-	-	0.001	0.667	0.207	0.135	-	-
HCM Control Delay (s)	8.3	-	-	0	9.3	53.9	11	8.8	-	-
HCM Lane LOS	A	-	-	A	A	F	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	0	4	0.8	0.5	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	24	368	220	29	36	34
Future Vol, veh/h	24	368	220	29	36	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	3	2	2	2
Mvmt Flow	27	418	250	33	41	39

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	283	0	-	0	530	142
Stage 1	-	-	-	-	267	-
Stage 2	-	-	-	-	263	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1276	-	-	-	479	880
Stage 1	-	-	-	-	754	-
Stage 2	-	-	-	-	757	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1276	-	-	-	466	880
Mov Cap-2 Maneuver	-	-	-	-	466	-
Stage 1	-	-	-	-	733	-
Stage 2	-	-	-	-	757	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	11.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1276	-	-	-	604
HCM Lane V/C Ratio	0.021	-	-	-	0.132
HCM Control Delay (s)	7.9	0.1	-	-	11.9
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	364	26	24	199	20	22	11	16	21	11	27
Future Vol, veh/h	14	364	26	24	199	20	22	11	16	21	11	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	4	2	2	2	10	2	2	2
Mvmt Flow	16	414	30	27	226	23	25	13	18	24	13	31

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	249	0	0	444	0	0	635	764	222	538	768	125
Stage 1	-	-	-	-	-	-	461	461	-	292	292	-
Stage 2	-	-	-	-	-	-	174	303	-	246	476	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	7.1	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.4	3.52	4.02	3.32
Pot Cap-1 Maneuver	1314	-	-	1112	-	-	363	332	758	426	330	902
Stage 1	-	-	-	-	-	-	550	564	-	692	670	-
Stage 2	-	-	-	-	-	-	811	662	-	736	555	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1314	-	-	1112	-	-	329	317	758	390	315	902
Mov Cap-2 Maneuver	-	-	-	-	-	-	329	317	-	390	315	-
Stage 1	-	-	-	-	-	-	541	555	-	681	651	-
Stage 2	-	-	-	-	-	-	747	643	-	691	546	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.9	15.5	13.4
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	399	1314	-	-	1112	-	-	497
HCM Lane V/C Ratio	0.14	0.012	-	-	0.025	-	-	0.135
HCM Control Delay (s)	15.5	7.8	0.1	-	8.3	0.1	-	13.4
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0.1	-	-	0.5

MOVEMENT SUMMARY

Site: 1 [PM 2040 With Project Trips (Site Folder: General)]

Myra Road / Heritage Road / Pine Street Intersection
Site Category: Roundabout Intersection
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Myra Road														
3	L2	10	2.0	10	2.0	0.186	9.6	LOS A	1.0	26.2	0.40	0.37	0.40	35.6
8	T1	402	4.0	402	4.0	0.186	3.1	LOS A	1.1	27.1	0.39	0.37	0.39	33.9
18	R2	101	2.0	101	2.0	0.186	3.6	LOS A	1.1	27.1	0.37	0.38	0.37	30.7
Approach		513	3.6	513	3.6	0.186	3.3	LOS A	1.1	27.1	0.38	0.37	0.38	33.3
East: Pine Street														
1	L2	102	2.0	102	2.0	0.257	8.5	LOS A	1.0	26.0	0.46	0.54	0.46	31.4
6	T1	74	2.0	74	2.0	0.257	2.4	LOS A	1.0	26.0	0.46	0.54	0.46	32.2
16	R2	93	2.0	93	2.0	0.257	3.1	LOS A	1.0	26.0	0.46	0.54	0.46	30.0
Approach		269	2.0	269	2.0	0.257	5.0	LOS A	1.0	26.0	0.46	0.54	0.46	31.1
North: Myra Road														
7	L2	62	2.0	62	2.0	0.218	9.5	LOS A	1.3	32.0	0.38	0.42	0.38	32.1
4	T1	429	2.0	429	2.0	0.218	3.0	LOS A	1.3	33.2	0.37	0.40	0.37	33.7
14	R2	128	2.0	128	2.0	0.218	3.5	LOS A	1.3	33.2	0.36	0.37	0.36	34.3
Approach		619	2.0	619	2.0	0.218	3.7	LOS A	1.3	33.2	0.37	0.39	0.37	33.7
West: Heritage Road														
5	L2	93	2.0	93	2.0	0.181	11.6	LOS B	0.7	17.5	0.46	0.66	0.46	34.6
2	T1	63	2.0	63	2.0	0.181	4.9	LOS A	0.7	17.5	0.46	0.66	0.46	32.0
12	R2	28	2.0	28	2.0	0.181	5.1	LOS A	0.7	17.5	0.46	0.66	0.46	33.0
Approach		184	2.0	184	2.0	0.181	8.3	LOS A	0.7	17.5	0.46	0.66	0.46	33.5
All Vehicles		1585	2.5	1585	2.5	0.257	4.3	LOS A	1.3	33.2	0.40	0.44	0.40	33.1

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection	
Int Delay, s/veh	11.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	217	168	88	165	0	171	2	121	2	4	4
Future Vol, veh/h	5	217	168	88	165	0	171	2	121	2	4	4
Conflicting Peds, #/hr	7	0	0	0	0	7	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	4	3	7	2	6	2	4	2	2	2
Mvmt Flow	5	228	177	93	174	0	180	2	127	2	4	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	181	0	0	405	0	0	692	694	318	759	782	182
Stage 1	-	-	-	-	-	-	327	327	-	367	367	-
Stage 2	-	-	-	-	-	-	365	367	-	392	415	-
Critical Hdwy	4.12	-	-	4.13	-	-	7.16	6.52	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.16	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.16	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.554	4.018	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1394	-	-	1148	-	-	353	366	718	323	326	861
Stage 1	-	-	-	-	-	-	677	648	-	653	622	-
Stage 2	-	-	-	-	-	-	646	622	-	633	592	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1385	-	-	1148	-	-	322	329	717	243	293	854
Mov Cap-2 Maneuver	-	-	-	-	-	-	322	329	-	243	293	-
Stage 1	-	-	-	-	-	-	674	645	-	645	562	-
Stage 2	-	-	-	-	-	-	580	562	-	516	589	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	2.9	34.9	14.9
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	416	1385	-	-	1148	-	-	376
HCM Lane V/C Ratio	0.744	0.004	-	-	0.081	-	-	0.028
HCM Control Delay (s)	34.9	7.6	0	-	8.4	0	-	14.9
HCM Lane LOS	D	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	6	0	-	-	0.3	-	-	0.1

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	0	7	65	0	80	0	422	68	101	458	0
Future Vol, veh/h	11	0	7	65	0	80	0	422	68	101	458	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	135	-	-	0	-	-	150	-	-	140	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	3	2	2	2	2
Mvmt Flow	12	0	8	71	0	87	0	459	74	110	498	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	948	1251	249	965	1214	267	498	0	0	533	0	0
Stage 1	718	718	-	496	496	-	-	-	-	-	-	-
Stage 2	230	533	-	469	718	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	215	171	751	209	180	731	1062	-	-	1031	-	-
Stage 1	386	431	-	524	544	-	-	-	-	-	-	-
Stage 2	752	523	-	544	431	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	174	153	751	190	161	731	1062	-	-	1031	-	-
Mov Cap-2 Maneuver	174	153	-	190	161	-	-	-	-	-	-	-
Stage 1	386	385	-	524	544	-	-	-	-	-	-	-
Stage 2	663	523	-	481	385	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.4	21.4	0	1.6
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1062	-	-	174	751	190	731	1031	-	-
HCM Lane V/C Ratio	-	-	-	0.069	0.01	0.372	0.119	0.106	-	-
HCM Control Delay (s)	0	-	-	27.2	9.8	34.8	10.6	8.9	-	-
HCM Lane LOS	A	-	-	D	A	D	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	1.6	0.4	0.4	-	-

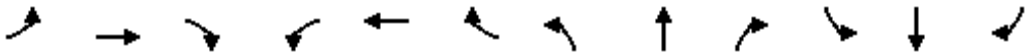
Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	205	0	48	205	118	0	9	1	81	10	1
Future Vol, veh/h	0	205	0	48	205	118	0	9	1	81	10	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	95	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	6	2	2
Mvmt Flow	0	223	0	52	223	128	0	10	1	88	11	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	351	0	0	223	0	0	620	678	223	620	614	287
Stage 1	-	-	-	-	-	-	223	223	-	391	391	-
Stage 2	-	-	-	-	-	-	397	455	-	229	223	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.16	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.16	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.16	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.554	4.018	3.318
Pot Cap-1 Maneuver	1208	-	-	1346	-	-	400	374	817	395	407	752
Stage 1	-	-	-	-	-	-	780	719	-	625	607	-
Stage 2	-	-	-	-	-	-	629	569	-	765	719	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1208	-	-	1346	-	-	380	359	817	375	391	752
Mov Cap-2 Maneuver	-	-	-	-	-	-	380	359	-	375	391	-
Stage 1	-	-	-	-	-	-	780	719	-	625	583	-
Stage 2	-	-	-	-	-	-	593	547	-	754	719	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1	14.8	17.9
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	380	1208	-	-	1346	-	-	379
HCM Lane V/C Ratio	0.029	-	-	-	0.039	-	-	0.264
HCM Control Delay (s)	14.8	0	-	-	7.8	-	-	17.9
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	177	44	215	254	72	62	351	152	44	431	55
Future Volume (veh/h)	66	177	44	215	254	72	62	351	152	44	431	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1856	1856	1870	1856	1870	1870	1856	1870	1722	1870	1870
Adj Flow Rate, veh/h	69	186	0	226	267	0	65	369	160	46	454	58
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	3	3	2	3	2	2	3	2	12	2	2
Cap, veh/h	193	583		275	737		191	741	316	143	969	123
Arrive On Green	0.11	0.17	0.00	0.15	0.21	0.00	0.11	0.31	0.31	0.09	0.31	0.31
Sat Flow, veh/h	1739	3526	1572	1781	3526	1585	1781	2393	1020	1640	3170	403
Grp Volume(v), veh/h	69	186	0	226	267	0	65	270	259	46	253	259
Grp Sat Flow(s),veh/h/ln	1739	1763	1572	1781	1763	1585	1781	1763	1651	1640	1777	1796
Q Serve(g_s), s	2.3	3.0	0.0	7.8	4.1	0.0	2.2	7.9	8.2	1.7	7.3	7.4
Cycle Q Clear(g_c), s	2.3	3.0	0.0	7.8	4.1	0.0	2.2	7.9	8.2	1.7	7.3	7.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.62	1.00		0.22
Lane Grp Cap(c), veh/h	193	583		275	737		191	546	511	143	543	549
V/C Ratio(X)	0.36	0.32		0.82	0.36		0.34	0.49	0.51	0.32	0.47	0.47
Avail Cap(c_a), veh/h	410	1109		420	1109		420	1386	1298	387	1397	1412
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.2	23.4	0.0	26.0	21.5	0.0	26.3	17.9	18.0	27.2	17.9	17.9
Incr Delay (d2), s/veh	0.4	0.2	0.0	4.3	0.2	0.0	0.4	2.5	2.8	0.5	2.3	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.2	0.0	3.4	1.6	0.0	0.9	3.3	3.2	0.6	3.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.6	23.6	0.0	30.4	21.7	0.0	26.7	20.4	20.8	27.7	20.1	20.2
LnGrp LOS	C	C		C	C		C	C	C	C	C	C
Approach Vol, veh/h		255	A		493	A		594			558	
Approach Delay, s/veh		24.4			25.7			21.3			20.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	24.7	13.8	14.5	10.8	24.4	11.0	17.3
Change Period (Y+Rc), s	5.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	50.0	15.0	20.0	15.0	50.0	15.0	20.0
Max Q Clear Time (g_c+I1), s	3.7	10.2	9.8	5.0	4.2	9.4	4.3	6.1
Green Ext Time (p_c), s	0.0	9.3	0.1	0.7	0.0	8.8	0.0	1.1

Intersection Summary	
HCM 6th Ctrl Delay	22.7
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	39	334	511	36	35	31
Future Vol, veh/h	39	334	511	36	35	31
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	44	375	574	40	39	35

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	614	0	-	0	870	308
Stage 1	-	-	-	-	594	-
Stage 2	-	-	-	-	276	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	961	-	-	-	291	688
Stage 1	-	-	-	-	514	-
Stage 2	-	-	-	-	746	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	961	-	-	-	274	687
Mov Cap-2 Maneuver	-	-	-	-	274	-
Stage 1	-	-	-	-	484	-
Stage 2	-	-	-	-	746	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	16.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	961	-	-	-	382
HCM Lane V/C Ratio	0.046	-	-	-	0.194
HCM Control Delay (s)	8.9	0.2	-	-	16.7
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7

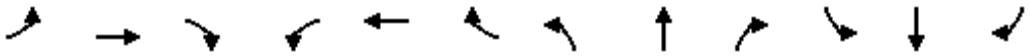
Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	319	19	20	472	34	55	6	41	20	8	19
Future Vol, veh/h	30	319	19	20	472	34	55	6	41	20	8	19
Conflicting Peds, #/hr	3	0	5	5	0	3	6	0	3	3	0	6
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	363	22	23	536	39	63	7	47	23	9	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	578	0	0	390	0	0	772	1071	201	861	1063	297
Stage 1	-	-	-	-	-	-	447	447	-	605	605	-
Stage 2	-	-	-	-	-	-	325	624	-	256	458	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	992	-	-	1165	-	-	289	219	806	249	222	699
Stage 1	-	-	-	-	-	-	560	572	-	451	486	-
Stage 2	-	-	-	-	-	-	661	476	-	726	565	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	989	-	-	1159	-	-	253	202	800	215	204	693
Mov Cap-2 Maneuver	-	-	-	-	-	-	253	202	-	215	204	-
Stage 1	-	-	-	-	-	-	533	544	-	430	470	-
Stage 2	-	-	-	-	-	-	606	461	-	644	537	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0.4	20.8	19.9
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	342	989	-	-	1159	-	-	294
HCM Lane V/C Ratio	0.339	0.034	-	-	0.02	-	-	0.182
HCM Control Delay (s)	20.8	8.8	0.2	-	8.2	0.1	-	19.9
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.5	0.1	-	-	0.1	-	-	0.7



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	289	197	35	322	22	197	307	45	29	259	162
Future Volume (veh/h)	101	289	197	35	322	22	197	307	45	29	259	162
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	106	304	207	37	339	23	207	323	47	31	273	171
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	242	450	381	235	396	330	429	1412	204	539	422	265
Arrive On Green	0.06	0.24	0.24	0.04	0.21	0.21	0.09	0.45	0.45	0.03	0.39	0.39
Sat Flow, veh/h	1781	1870	1581	1781	1870	1560	1781	3117	449	1781	1075	673
Grp Volume(v), veh/h	106	304	207	37	339	23	207	183	187	31	0	444
Grp Sat Flow(s),veh/h/ln	1781	1870	1581	1781	1870	1560	1781	1777	1789	1781	0	1748
Q Serve(g_s), s	3.7	11.8	9.2	1.2	14.0	0.9	5.4	5.0	5.1	0.7	0.0	16.5
Cycle Q Clear(g_c), s	3.7	11.8	9.2	1.2	14.0	0.9	5.4	5.0	5.1	0.7	0.0	16.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.25	1.00		0.39
Lane Grp Cap(c), veh/h	242	450	381	235	396	330	429	805	811	539	0	687
V/C Ratio(X)	0.44	0.68	0.54	0.16	0.86	0.07	0.48	0.23	0.23	0.06	0.00	0.65
Avail Cap(c_a), veh/h	290	498	421	335	498	415	429	805	811	646	0	687
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.7	27.5	26.5	22.3	30.4	25.2	14.2	13.3	13.4	11.0	0.0	19.8
Incr Delay (d2), s/veh	0.5	3.2	1.2	0.1	11.5	0.1	0.3	0.7	0.7	0.0	0.0	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	5.5	3.5	0.5	7.3	0.3	2.0	2.0	2.1	0.3	0.0	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.1	30.7	27.7	22.4	41.9	25.3	14.5	14.0	14.0	11.0	0.0	24.4
LnGrp LOS	C	C	C	C	D	C	B	B	B	B	A	C
Approach Vol, veh/h		617			399			577			475	
Approach Delay, s/veh		28.6			39.1			14.2			23.5	
Approach LOS		C			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	36.5	9.8	21.6	7.2	41.4	7.5	24.0
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	* 4.7	* 4.7	5.1	* 4.7	* 4.7
Max Green Setting (Gmax), s	* 7.3	24.9	* 7.3	* 21	* 7.3	24.9	* 7.3	* 21
Max Q Clear Time (g_c+I1), s	7.4	18.5	5.7	16.0	2.7	7.1	3.2	13.8
Green Ext Time (p_c), s	0.0	1.5	0.0	1.0	0.0	2.0	0.0	1.6

Intersection Summary	
HCM 6th Ctrl Delay	25.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	178	26	170	379	61	34	425	140	51	516	198
Future Volume (veh/h)	141	178	26	170	379	61	34	425	140	51	516	198
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1841	1870	1870	1870	1870	1856	1826	1870	1870	1870
Adj Flow Rate, veh/h	147	185	27	177	395	64	35	443	146	53	538	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	4	2	2	2	2	3	5	2	2	2
Cap, veh/h	188	453	66	222	476	77	89	750	245	117	1076	
Arrive On Green	0.11	0.28	0.28	0.12	0.30	0.30	0.05	0.29	0.29	0.07	0.30	0.00
Sat Flow, veh/h	1781	1596	233	1781	1570	254	1781	2611	853	1781	3554	1585
Grp Volume(v), veh/h	147	0	212	177	0	459	35	298	291	53	538	0
Grp Sat Flow(s),veh/h/ln	1781	0	1828	1781	0	1825	1781	1763	1701	1781	1777	1585
Q Serve(g_s), s	5.4	0.0	6.3	6.5	0.0	15.7	1.3	9.7	9.9	1.9	8.3	0.0
Cycle Q Clear(g_c), s	5.4	0.0	6.3	6.5	0.0	15.7	1.3	9.7	9.9	1.9	8.3	0.0
Prop In Lane	1.00		0.13	1.00		0.14	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	188	0	519	222	0	553	89	506	488	117	1076	
V/C Ratio(X)	0.78	0.00	0.41	0.80	0.00	0.83	0.39	0.59	0.60	0.45	0.50	
Avail Cap(c_a), veh/h	452	0	954	452	0	952	266	788	761	266	1590	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.2	0.0	19.4	28.5	0.0	21.8	30.9	20.5	20.6	30.2	19.2	0.0
Incr Delay (d2), s/veh	5.2	0.0	0.5	4.8	0.0	3.3	1.0	3.9	4.2	2.0	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	2.6	2.9	0.0	6.6	0.5	4.2	4.1	0.8	3.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.4	0.0	20.0	33.3	0.0	25.1	31.9	24.4	24.7	32.2	20.5	0.0
LnGrp LOS	C	A	B	C	A	C	C	C	C	C	C	
Approach Vol, veh/h		359			636			624			591	A
Approach Delay, s/veh		25.9			27.4			25.0			21.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	24.8	10.6	24.8	7.9	23.8	11.9	23.5
Change Period (Y+Rc), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Max Green Setting (Gmax), s	10.0	30.0	17.0	35.0	10.0	30.0	17.0	35.0
Max Q Clear Time (g_c+I1), s	3.3	10.3	7.4	17.7	3.9	11.9	8.5	8.3
Green Ext Time (p_c), s	0.0	7.2	0.2	2.6	0.0	7.3	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	24.9
HCM 6th LOS	C

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	60	68	84	539	679	32
Future Volume (veh/h)	60	68	84	539	679	32
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1870	1870	1811	1870	1870
Adj Flow Rate, veh/h	65	74	91	586	738	35
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	2	2	6	2	2
Cap, veh/h	312	146	135	2356	1757	83
Arrive On Green	0.09	0.09	0.08	0.68	0.51	0.51
Sat Flow, veh/h	3401	1585	1781	3532	3547	164
Grp Volume(v), veh/h	65	74	91	586	380	393
Grp Sat Flow(s),veh/h/ln	1700	1585	1781	1721	1777	1841
Q Serve(g_s), s	0.8	2.0	2.2	2.9	6.0	6.0
Cycle Q Clear(g_c), s	0.8	2.0	2.2	2.9	6.0	6.0
Prop In Lane	1.00	1.00	1.00			0.09
Lane Grp Cap(c), veh/h	312	146	135	2356	904	936
V/C Ratio(X)	0.21	0.51	0.68	0.25	0.42	0.42
Avail Cap(c_a), veh/h	1747	814	597	3843	1985	2056
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.8	19.4	20.2	2.7	6.9	6.9
Incr Delay (d2), s/veh	0.1	1.0	2.2	0.2	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.8	0.9	0.4	1.7	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.9	20.4	22.3	2.9	8.0	8.0
LnGrp LOS	B	C	C	A	A	A
Approach Vol, veh/h	139			677	773	
Approach Delay, s/veh	19.7			5.5	8.0	
Approach LOS	B			A	A	

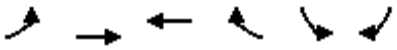
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		35.7		9.1	7.9	27.8
Change Period (Y+Rc), s		5.0		5.0	4.5	5.0
Max Green Setting (Gmax), s		50.0		23.0	15.0	50.0
Max Q Clear Time (g_c+I1), s		4.9		4.0	4.2	8.0
Green Ext Time (p_c), s		11.4		0.2	0.1	14.8

Intersection Summary	
HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	195	16	22	214	189	26	298	16	121	423	204
Future Volume (veh/h)	137	195	16	22	214	189	26	298	16	121	423	204
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1856	1870	1856	1870	1870	1856	1870
Adj Flow Rate, veh/h	144	205	17	23	225	199	27	314	17	127	445	215
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	3	2	3	2	2	3	2
Cap, veh/h	370	463	466	362	332	449	402	1024	55	543	1278	752
Arrive On Green	0.11	0.25	0.25	0.04	0.18	0.18	0.05	0.30	0.30	0.11	0.36	0.36
Sat Flow, veh/h	1781	1870	1579	1781	1870	1565	1781	3402	183	1781	3526	1585
Grp Volume(v), veh/h	144	205	17	23	225	199	27	162	169	127	445	215
Grp Sat Flow(s),veh/h/ln	1781	1870	1579	1781	1870	1565	1781	1763	1823	1781	1763	1585
Q Serve(g_s), s	4.2	6.2	0.5	0.6	7.5	6.9	0.6	4.7	4.7	3.0	6.1	5.5
Cycle Q Clear(g_c), s	4.2	6.2	0.5	0.6	7.5	6.9	0.6	4.7	4.7	3.0	6.1	5.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	370	463	466	362	332	449	402	530	548	543	1278	752
V/C Ratio(X)	0.39	0.44	0.04	0.06	0.68	0.44	0.07	0.31	0.31	0.23	0.35	0.29
Avail Cap(c_a), veh/h	707	1125	1025	824	844	877	854	928	960	885	1856	1012
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.8	21.1	16.7	17.3	25.6	19.4	12.1	17.9	17.9	12.7	15.5	10.6
Incr Delay (d2), s/veh	0.7	0.5	0.0	0.1	1.8	0.5	0.1	0.2	0.2	0.2	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	2.5	0.2	0.2	3.3	2.4	0.2	1.8	1.9	1.1	2.2	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.4	21.6	16.7	17.4	27.4	19.9	12.1	18.1	18.1	12.9	15.6	10.8
LnGrp LOS	B	C	B	B	C	B	B	B	B	B	B	B
Approach Vol, veh/h		366			447			358			787	
Approach Delay, s/veh		20.5			23.5			17.7			13.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	25.0	7.8	21.5	8.1	29.1	12.4	16.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	20.0	35.0	20.0	40.0	20.0	35.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	7.5	6.7	2.6	8.2	2.6	8.1	6.2	9.5
Green Ext Time (p_c), s	0.3	1.5	0.0	1.0	0.0	3.0	0.3	1.4

Intersection Summary	
HCM 6th Ctrl Delay	18.0
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	287	666	778	52	57	404
Future Volume (veh/h)	287	666	778	52	57	404
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1767	1870	1870	1870	1870	1796
Adj Flow Rate, veh/h	296	687	802	54	59	416
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	9	2	2	2	2	7
Cap, veh/h	263	2471	1657	739	320	481
Arrive On Green	0.16	0.70	0.47	0.47	0.18	0.18
Sat Flow, veh/h	1682	3647	3647	1585	1781	2679
Grp Volume(v), veh/h	296	687	802	54	59	416
Grp Sat Flow(s),veh/h/ln	1682	1777	1777	1585	1781	1340
Q Serve(g_s), s	15.0	7.0	14.9	1.8	2.7	14.5
Cycle Q Clear(g_c), s	15.0	7.0	14.9	1.8	2.7	14.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	263	2471	1657	739	320	481
V/C Ratio(X)	1.13	0.28	0.48	0.07	0.18	0.86
Avail Cap(c_a), veh/h	263	2471	1657	739	464	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.96	0.96
Uniform Delay (d), s/veh	40.5	5.5	17.7	14.2	33.4	38.3
Incr Delay (d2), s/veh	93.7	0.3	1.0	0.2	0.1	5.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	1.8	5.5	0.6	1.2	10.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	134.2	5.8	18.7	14.3	33.5	43.7
LnGrp LOS	F	A	B	B	C	D
Approach Vol, veh/h		983	856		475	
Approach Delay, s/veh		44.5	18.4		42.4	
Approach LOS		D	B		D	

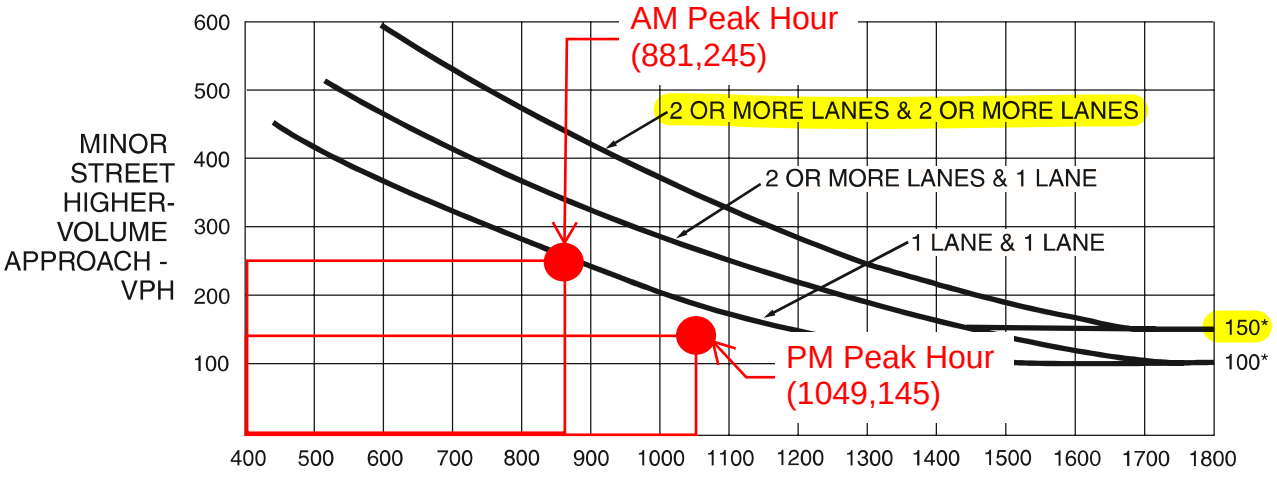
Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	73.8		22.2	22.0	51.8
Change Period (Y+Rc), s	7.0		5.0	7.0	7.0
Max Green Setting (Gmax), s	59.0		25.0	15.0	37.0
Max Q Clear Time (g_c+I1), s	9.0		16.5	17.0	16.9
Green Ext Time (p_c), s	4.5		0.8	0.0	4.9

Intersection Summary	
HCM 6th Ctrl Delay	34.4
HCM 6th LOS	C

Appendix D

Peak Hour Signal Warrant Evaluation

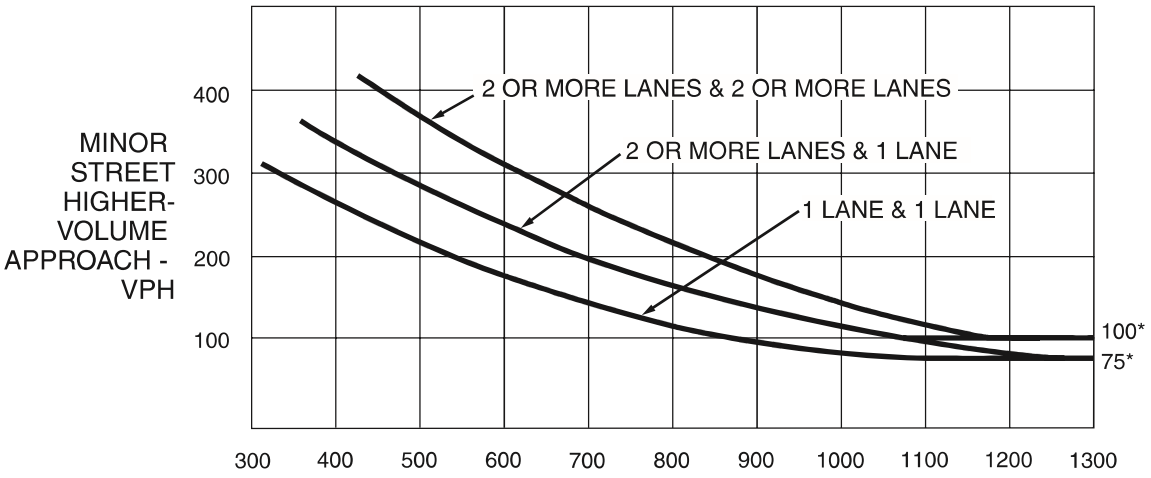
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

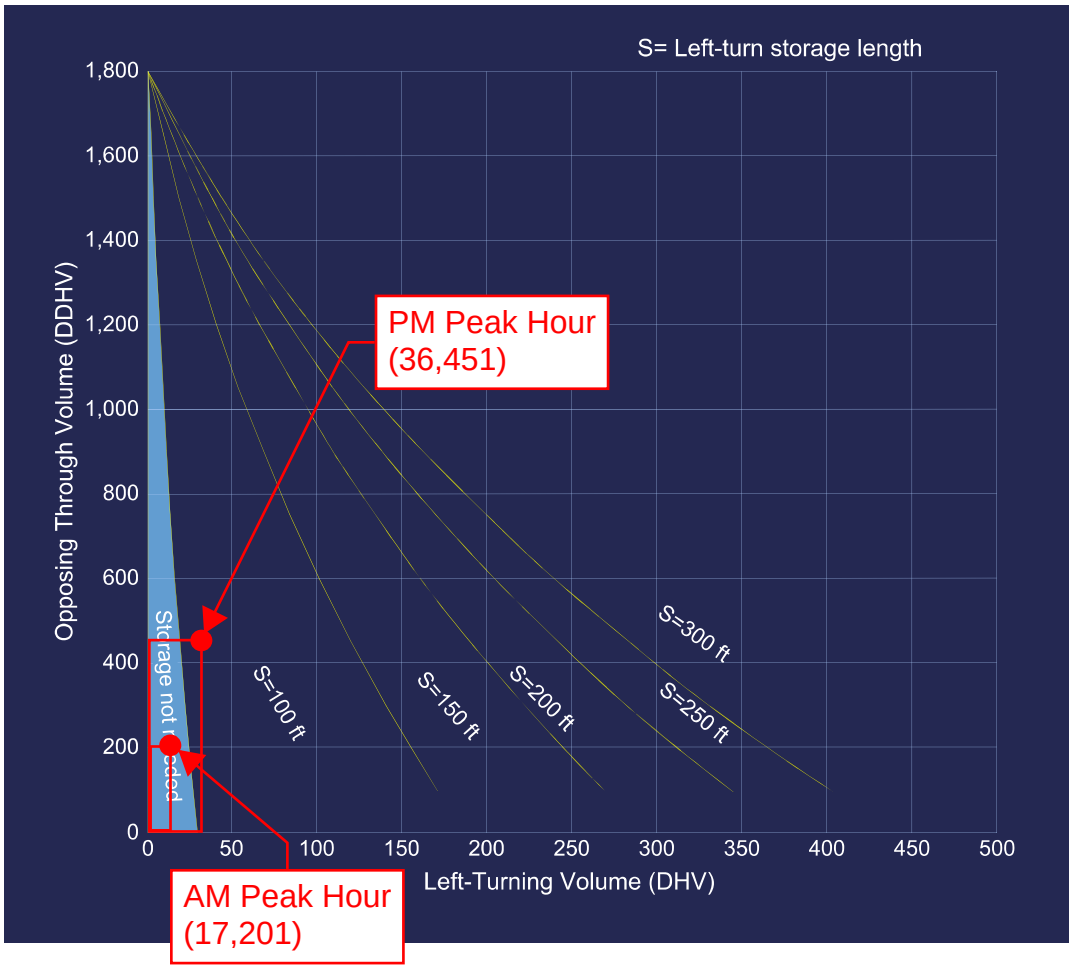
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Appendix E
Turn Lane Evaluations

Exhibit 1310-7b Left-Turn Storage Guidelines: Four-Lane, Unsignalized



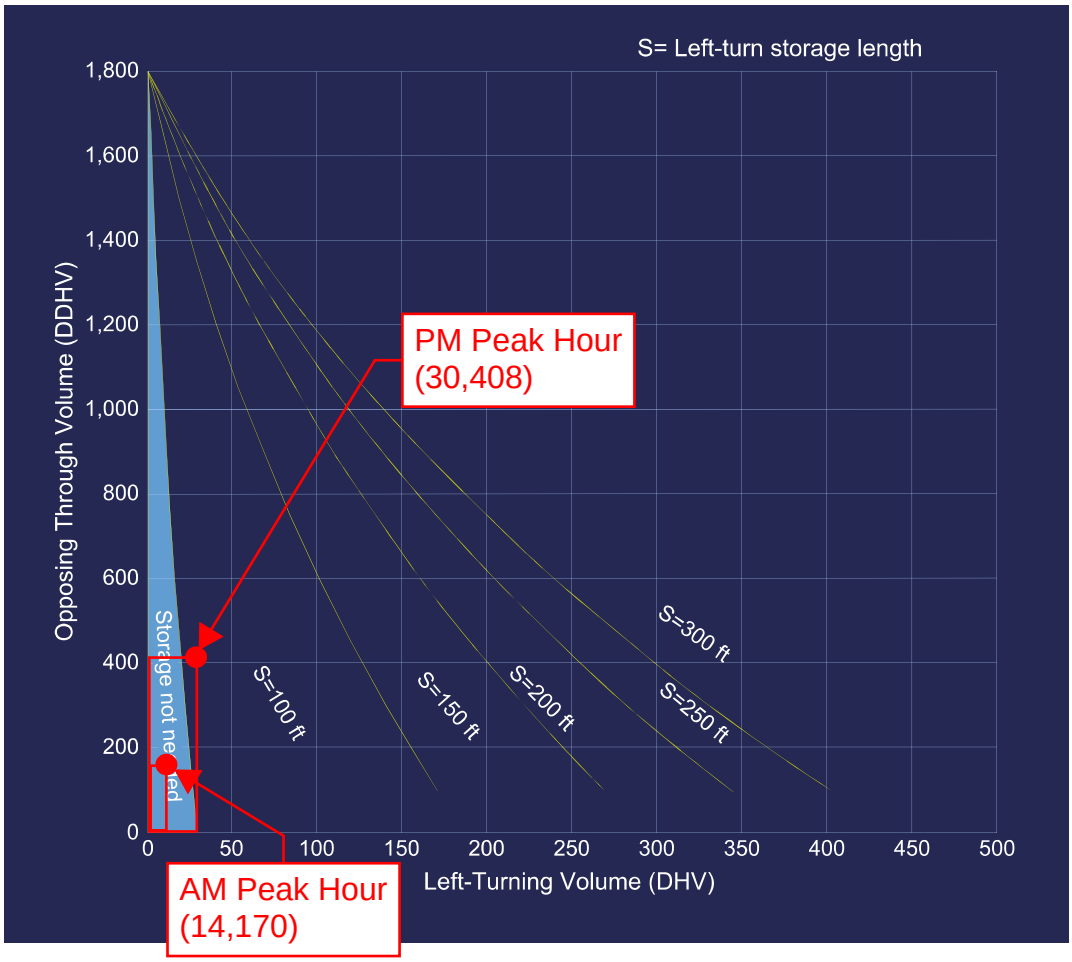
Determine the storage length on two-lane highways by using Exhibits 1310-8a through 8c. On four-lane highways, use Exhibit 1310-7b. These lengths do not consider trucks. Use Exhibit 1310-9 for storage length when trucks are present.

Use turn simulation software (such as AutoTURN®) to verify that left-turn movements for the design vehicle(s) do not have conflicts. Design opposing left-turn design vehicle paths with a minimum 4-foot (12-foot desirable) clearance between opposing turning paths.

Where one-way left-turn channelization with curbing is to be provided, evaluate surface water runoff and design additional drainage facilities if needed to control the runoff.

Provide illumination at left-turn lanes in accordance with the guidelines in Chapter 1040.

Exhibit 1310-7b Left-Turn Storage Guidelines: Four-Lane, Unsignalized



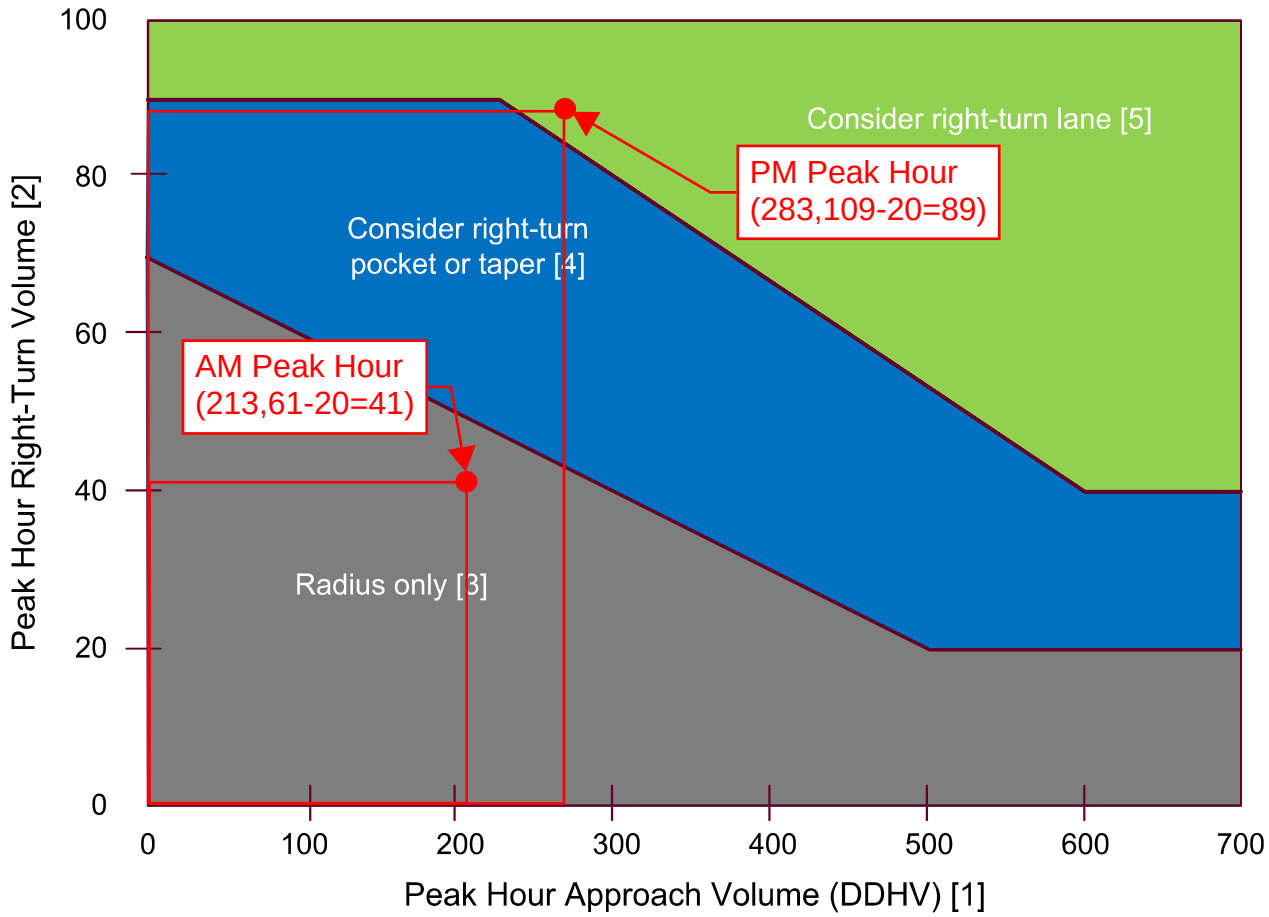
Determine the storage length on two-lane highways by using Exhibits 1310-8a through 8c. On four-lane highways, use Exhibit 1310-7b. These lengths do not consider trucks. Use Exhibit 1310-9 for storage length when trucks are present.

Use turn simulation software (such as AutoTURN®) to verify that left-turn movements for the design vehicle(s) do not have conflicts. Design opposing left-turn design vehicle paths with a minimum 4-foot (12-foot desirable) clearance between opposing turning paths.

Where one-way left-turn channelization with curbing is to be provided, evaluate surface water runoff and design additional drainage facilities if needed to control the runoff.

Provide illumination at left-turn lanes in accordance with the guidelines in Chapter 1040.

Exhibit 1310-11 Right-Turn Lane Guidelines



Notes:

[1] For two-lane highways, use the peak hour DDHV (through + right-turn).
For multilane, high-speed highways (posted speed 45 mph or above), use the right-lane peak hour approach volume (through + right-turn).

[2] When all three of the following conditions are met, reduce the right-turn DDHV by 20:

- The posted speed is 45 mph or below
- The right-turn volume is greater than 40 VPH
- The peak hour approach volume (DDHV) is less than 300 VPH

[3] For right-turn corner design, see Exhibit 1310-6.

[4] For right-turn pocket or taper design, see Exhibit 1310-12.

[5] For right-turn lane design, see Exhibit 1310-13.

Appendix F

Proportionate Share Contributions

From: Jay Peninger <jpeninger@wallawallawa.gov>
Sent: Thursday, November 12, 2020 12:01 PM
To: David Holt; Neal Chavre; Scott Mansur (smm@dksassociates.com)
Cc: Bhauvesh Jaya; John A. Manix; Jason L. Mattox
Subject: RE: Proportionate Share Methodology for Avery Estates (PPL-20-0003)
Attachments: Proportionate Share Methodology.pdf

David,

After review of the proposed proportionate share the City would prefer to use the methodology below (and attached) for proportionate share calculations.
It is different from what WSDOT provides in that the proportionate share is based on the percentage of vehicles that the development contributes to the total projected growth at the intersection (from existing to build).
If the intersection fails under any future scenario (with or without project), then this is how the proportionate share percentage is calculated at the intersection: A/(C-B)
A = Site Project Trip Generation
B = Existing Conditions Total Entering Vehicles
C = Future Build Conditions (with project) Total Entering Vehicles

Segment proportionate share would need to include the segment distance over the total corridor length when evaluating an existing planned project.

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Development Engineer
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City of Walla Walla
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From: David Holt <David.Holt@pbsusa.com>
Sent: Monday, November 02, 2020 10:27 PM
To: Neal Chavre <nchavre@wallawallawa.gov>; Jay Peninger <jpeninger@wallawallawa.gov>; Scott Mansur (smm@dksassociates.com) <smm@dksassociates.com>
Cc: Bhauvesh Jaya <Bhauvesh.Jaya@pbsusa.com>; John A. Manix <John.Manix@pbsusa.com>; Jason L. Mattox <Jason.Mattox@pbsusa.com>
Subject: Proportionate Share Methodology for Avery Estates (PPL-20-0003)

Hello Neal, Jay, and Scott,

I write to propose a method for estimating the proportionate share contributions for the above projects, as required by the engineering review comments dated October 1, 2020. Please reply with your concurrence and comments.

In general, we propose to calculate the proportionate shares based on the WSDOT Development Services Manual, specifically Chapter 4.2.09 for intersection impacts and Chapter 4.2.10 for corridor impacts.

For intersections: the proportionate Traffic Mitigation Payment (TMP) = (A/B) * C

…where A = the PM trips generated by the project (or one of its phases) at the intersection

…where B = the total PM trips entering the intersection at the buildout year (2025 in this case)

…where C = the approximate improvement cost (including design, right-of-way, and construction)

The project's TMP multiplies the total improvement cost by a ratio of the project PM trips to the total PM trips.

We propose to use the above intersection method where intersection LOS improvements (possibly at Myra/Futura) and pedestrian connections (possibly Offner and Avery) are recommended.

For corridor segments: the proportionate Traffic Mitigation Payment (TMP) = (A/B) * C * (D/L)

…where A = the PM trips generated by the project (or one of its phases) on an individual corridor segment

…where B = applicable maximum service flow rate for all through lanes in both directions for ideal conditions per the *Highway Capacity Manual* (HCM) at the roadway's adopted LOS standard (City of Walla Walla standard is LOS D for arterials)

…where C = the approximate improvement cost (including design, right-of-way, and construction)

…where D = the segment distance

…where L = the total corridor length

The project's TMP multiplies the total improvement cost by two ratios, one for PM trips (project trips to the ideal trips at the LOS threshold) and one for the segment length within the corridor.

We propose to use the above corridor method where left-turn lanes are recommended (possibly on Rose at Offner and Avery).

We'll fill in the specific values to these formulas as the study is updated. For now, we simply hope to receive your agreement to proceed with this proportionate share methodology.

Thank you for your time, and please let me know if you have any questions.

David Holt, PE
Project Traffic Engineer

PBS
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Proportionate Share Methodology

Here is a summary of a reasonable proportional share calculation of the project impacts that have been approved by other agencies based upon the following criteria:

1. Determine for each deficiency the appropriate off-site mitigation and the cost of each mitigation measure

2. Determine when the cause of each mitigation in the study area is triggered:

    a. Based upon existing conditions alone

    b. Based upon existing + approved future background conditions

    c. Based upon existing + approved/background + proposed project phase

3. Determine if the mitigation measures are addressed by improvements with committed funding (such as the CFP). If so, these mitigation measures will be assigned a zero proportionate share since funding is in place.

4. For motor vehicles mitigations in the following cause categories, compute proportionate share as follows (if proportionate share of bicycle/pedestrian improvements is necessary, utilize similar methods, but further coordination will be necessary with local agency staff):

    Motor Vehicle Capacity Deficiencies as determined by level of service or v/c ratio

2a. Take the proposed project total entering vehicle volume (TEV) at the intersection being mitigated in the peak period where the deficiency occurs TEV and divide by existing TEV;

2b/c. Take the proposed project TEV volume and divide by the sum of background growth TEV + approved projects TEV + proposed project TEV;

Traffic Mitigation Proportionate Share Calculations

Deficiency	Mitigation	Mitigation Type	Total Mitigation Cost*	Intersection Mitigation: Total Entering Volumes Proportion					Corridor Projects: Roadway Length Proportion					Project Proportionate Share
				Corridor Mitigation: Total Volumes on Segment										
				Peak Hour	2020 Baseline Year Volume	Project Trips	2025 With Project Volume	Project Impact by Volumes	Total Length	Total Extent	Segment Length	Segment Extent	Project Impact by Length	
Column			A		B	C	D	E	F		G		H	I
Equation			--		--	--	--	=C/(D-B)	--		--		=G/F	=A*E*H
Traffic on Offner Rd increases by >25% (AM & PM Pk Hrs)	Connect pedestrian path across RR	Intersection	$16,200	AM	24	94	118							
				PM	39	92	133	99%						$16,000
Traffic on Avery St (N of Rose) increases by >25% (AM & PM Pk Hrs)	Construct sidewalk along W side of Avery	Corridor	$101,300	AM	27	71	98		400 ft	237 Avery St to Rose St	400 ft	237 Avery St to Rose St	100%	$101,300
	Connect sidewalk across RR	Intersection	$16,200	PM	25	86	111	100%						$16,200
EB Rose St LT lane merited at Offner Rd (PM Pk Hr)	Corridor lane conversion from 4 lanes to 3 lanes**	Corridor	$1,130,000	AM										
				PM	671	95	800	74%	1.23 mi	Myra Rd to 9th Ave	0.10 mi	Wildwood St to Offner Rd	8%	$67,700
EB Rose St LT lane merited at Avery St (PM Pk Hr)	Corridor lane conversion from 4 lanes to 3 lanes**	Corridor	$1,130,000	AM										
				PM	688	75	798	68%	1.23 mi	Myra Rd to 9th Ave	0.10 mi	Cruthers St to Avery St	8%	$62,600
Ped Xg Rose St at Offner Rd	Funds for future refuge island and curb ramps with lane conversion	Intersection	$25,000	AM	483	122	628							
				PM	699	131	866	81%						$20,300
Ped Xg Rose St at Avery St	Funds for future refuge island and curb ramps with lane conversion	Intersection	$25,000	AM	525	115	666							
				PM	755	122	915	79%						$19,700

** Cost estimates are preliminary and will need refinement.*

*** The lane conversion project along Rose St may be bid with plastic pavement markings ($1.13M estimate provided by City staff) or with paint pavement markings ($521,024 estimate provided by City staff). This spreadsheet assumes the plastic pavement markings will be used.*

Total Project Proportionate Share	**$303,800**
Primary (net new) Weekday PM Peak Hour Trips	358
Contribution per Primary PM Peak Hour Trip	**$850**

Appendix G
Collision Data and Calculations

Collision Rate Calculations at
Myra Road / Heritage Road / Pine Street

Intersection:	Myra Road / Heritage Road / Pine Street	Date	5/7/2020

Ra =	System Wide Average Collision rate =	0.6
K =	Statistical Constant =	1.645
Average Daily cars passing Through intersection		
	ADT	1510
		2030
		3810
		4710
M=	Millions of Vehicles for a five year period =	**22.0095**

Rc=	Critical Collision Rate =	**0.85**

Collision Rate

Number of Collisions =	9
Number of years =	5
Collision Rate =	**0.41**

Rc= Ra+(K*Ra/M)^.5)-1/(2*M)

ADT = 2020 PM Count X 10
PM Peak Hour= Approx. 10% ADT

Collision Rate Calculations at
N 9th Avenue / N 9th Court / Pine Street

Intersection:	N 9th Avenue / N 9th Court / Pine Street	Date	5/7/2020

Ra =	System Wide Average Collision rate =	0.6
K =	Statistical Constant =	1.645
Average Daily cars passing Through intersection		
	ADT	3130
		1990
		2410
		80
M=	Millions of Vehicles for a five year period =	**13.88825**

Rc=	Critical Collision Rate =	**0.91**

Collision Rate

Number of Collisions =	3
Number of years =	5
Collision Rate =	**0.22**

Rc= Ra+(K*Ra/M)^.5)-1/(2*M)

ADT = 2020 PM Count X 10
PM Peak Hour= Approx. 10% ADT

Collision Rate Calculations at
Wallula Avenue / Lambert Avenue / Rose Street

Intersection:	Wallula Avenue / Lambert Avenue / Rose Stre	Date	5/7/2020

Ra =	System Wide Average Collision rate =	0.6
K =	Statistical Constant =	1.645
Average Daily cars passing Through intersection		
	ADT	1510
		2860
		80
		660
M=	Millions of Vehicles for a five year period =	**9.32575**

Rc=	Critical Collision Rate =	**0.96**

Collision Rate

Number of Collisions =	2
Number of years =	5
Collision Rate =	**0.21**

Rc= Ra+(K*Ra/M)^.5)-1/(2*M)

ADT = 2020 PM Count X 10
PM Peak Hour= Approx. 10% ADT

Collision Rate Calculations at
Myra Road / Rose Street

Intersection:	Myra Road / Rose Street	Date	5/7/2020

Ra =	System Wide Average Collision rate =	0.6
K =	Statistical Constant =	1.645

Average Daily cars passing Through intersection

	ADT	2090
		4140
		4120
		4100
M=	Millions of Vehicles for a five year period =	**26.37125**

Rc=	Critical Collision Rate =	**0.83**

Collision Rate

Number of Collisions =	7
Number of years =	5
Collision Rate =	**0.27**

Rc= Ra+(K*Ra/M)^.5)-1/(2*M)

ADT = 2020 PM Count X 10
PM Peak Hour= Approx. 10% ADT

Collision Rate Calculations at
Offner Road / Rose Street

Intersection:	Offner Road / Rose Street	Date	5/7/2020

Ra =	System Wide Average Collision rate =	0.6
K =	Statistical Constant =	1.645
Average Daily cars passing Through intersection		
	ADT	2570
		4190
		0
		230
M=	Millions of Vehicles for a five year period =	**12.75675**

Rc=	Critical Collision Rate =	**0.92**

Collision Rate

Number of Collisions =	5
Number of years =	5
Collision Rate =	**0.39**

Rc= Ra+(K*Ra/M)^.5)-1/(2*M)

ADT = 2020 PM Count X 10
PM Peak Hour= Approx. 10% ADT

Collision Rate Calculations at
Avery Street / Rose Street

Intersection:	Avery Street / Rose Street	Date	5/7/2020

Ra =	System Wide Average Collision rate =	0.6
K =	Statistical Constant =	1.645
Average Daily cars passing Through intersection		
	ADT	2690
		3980
		760
		120
M=	Millions of Vehicles for a five year period =	**13.77875**
Rc=	Critical Collision Rate =	**0.91**

Collision Rate

Number of Collisions =	7
Number of years =	5
Collision Rate =	**0.51**

Rc= Ra+(K*Ra/M)^.5)-1/(2*M)

ADT = 2020 PM Count X 10
PM Peak Hour= Approx. 10% ADT

Collision Rate Calculations at
N 9th Avenue / Rose Street

Intersection:	N 9th Avenue / Rose Street	Date	5/7/2020

Ra =	System Wide Average Collision rate =	0.6
K =	Statistical Constant =	1.645
Average Daily cars passing Through intersection		
	ADT	4600
		2860
		4420
		3690
M=	Millions of Vehicles for a five year period =	**28.41525**
Rc=	Critical Collision Rate =	**0.82**

Collision Rate

Number of Collisions =	18
Number of years =	5
Collision Rate =	**0.63**

Rc= Ra+(K*Ra/M)^.5)-1/(2*M)

ADT = 2020 PM Count X 10
PM Peak Hour= Approx. 10% ADT

Collision Rate Calculations at
Myra Road / C Street / Poplar Street

Intersection:	Myra Road / C Street / Poplar Street	Date	5/7/2020

Ra =	System Wide Average Collision rate =	0.6
K =	Statistical Constant =	1.645

Average Daily cars passing Through intersection

	ADT	2570
		5000
		4650
		5910
M=	Millions of Vehicles for a five year period =	**33.08725**

Rc=	Critical Collision Rate =	**0.81**

Collision Rate

Number of Collisions =	26
Number of years =	5
Collision Rate =	**0.79**

Rc= Ra+(K*Ra/M)^.5)-1/(2*M)

ADT = 2020 PM Count X 10
PM Peak Hour= Approx. 10% ADT

Collision Rate Calculations at
Myra Road / Whitman Drive

Intersection:	Myra Road / Whitman Drive	Date	5/7/2020

Ra =	System Wide Average Collision rate =	0.6
K =	Statistical Constant =	1.645

Average Daily cars passing Through intersection

ADT	880
	0
	5020
	5650

M=	Millions of Vehicles for a five year period =	**21.07875**

Rc=	Critical Collision Rate =	**0.85**

Collision Rate

Number of Collisions =	1
Number of years =	5

Collision Rate =	**0.05**

Rc= Ra+(K*Ra/M)^.5)-1/(2*M)

ADT = 2020 PM Count X 10
PM Peak Hour= Approx. 10% ADT

Collision Rate Calculations at
Myra Road / 12th Street / The Dalles Military Road

Intersection:	Myra Rd / 12th St / The Dalles Military Rd	Date	5/7/2020

Ra =	System Wide Average Collision rate =	0.6
K =	Statistical Constant =	1.645
Average Daily cars passing Through intersection		
	ADT	2850
		3480
		2690
		6070
M=	Millions of Vehicles for a five year period =	**27.53925**

Rc=	Critical Collision Rate =	**0.82**

Collision Rate

Number of Collisions =	14
Number of years =	5
Collision Rate =	**0.51**

Rc= Ra+(K*Ra/M)^.5)-1/(2*M)

ADT = 2020 PM Count X 10
PM Peak Hour= Approx. 10% ADT

Collision Rate Calculations at
Myra Road / SR 125

Intersection:	Myra Road / SR 125	Date	5/7/2020

Ra =	System Wide Average Collision rate =	0.6
K =	Statistical Constant =	1.645
Average Daily cars passing Through intersection		
	ADT	7720
		6810
		0
		3720
M=	Millions of Vehicles for a five year period =	**33.30625**

Rc=	Critical Collision Rate =	**0.81**

Collision Rate

Number of Collisions =	22
Number of years =	5
Collision Rate =	**0.66**

Rc= Ra+(K*Ra/M)^.5)-1/(2*M)

ADT = 2020 PM Count X 10
PM Peak Hour= Approx. 10% ADT

OFFICER REPORTED CRASHES THAT OCCURRED ON ALL ROADS IN WALLA WALLA COUNTY
01/01/2015 - *December 2019*

Under 23 U.S. Code § 148 and 23 U.S. Code § 409, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

JURISDICTION	COUNTY	CITY	PRIMARY TRAFFICWAY	BLOCK NUMBER	INTERSECTING TRAFFICWAY	DIST FROM REF POINT	MI or FT	COMP DIR FROM REF POINT	REFERENCE POINT NAME	MILEPOST	DATE	TIME	MOST SEVERE INJURY TYPE	VEHICLE 1 TYPE	VEHICLE 2 TYPE	JUNCTION RELATIONSHIP	WEATHER	ROADWAY SURFACE CONDITION	LIGHTING CONDITION	FIRST COLLISION TYPE / OBJECT STRUCK	VEHICLE 1 ACTION	VEHICLE 2 ACTION	VEHICLE 1 COMPASS DIRECTION FROM	VEHICLE 1 COMPASS DIRECTION TO	VEHICLE 2 COMPASS DIRECTION FROM	VEHICLE 2 COMPASS DIRECTION TO	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	PEDESTRIAN CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	FIRST IMPACT LOCATION (City, County & Misc Trafficways - 2010 forward)
City Street	Walla Walla	Walla Walla	NE MYRA RD	800		42	F	S	W PINE ST SR 125 SPUR		12/02/2018	18:52	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb		Roundabout Related but not at Roundab	Clear or Partly Cloudy	Dry	Dark-Street Lights On	Wood Sign Post	Going Straight Ahead		North	South			None				Past the Outside Shoulder of Primary Trafficway
State Route	Walla Walla	Walla Walla	125SP125SP		HERITAGE RD /MYRA RD					6.72	11/13/2019	17:20	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	Circulating Roundabout	Raining	Wet	Dark-Street Lights On	From same direction - one left turn - one straight	Making Left Turn	Going Straight Ahead	North	East	North	South	Inattention		None		Lane 2 Decreasing Milepost
State Route	Walla Walla	Walla Walla	125SP125SP		HERITAGE RD /MYRA RD					6.73	07/11/2015	16:20	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	Exiting Roundabout	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - both moving - sideswipe	Changing Lanes	Going Straight Ahead	South	North	South	North	Did Not Grant RW to Vehicle		None		Lane 2 Increasing Milepost
State Route	Walla Walla	Walla Walla	125SP125SP		HERITAGE RD /MYRA RD					6.73	09/15/2016	07:01	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	Exiting Roundabout	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - both moving - sideswipe	Changing Lanes	Going Straight Ahead	South	North	South	North	Inattention	Did Not Grant RW to Vehicle	None		Lane 1 Increasing Milepost
State Route	Walla Walla	Walla Walla	125SP125SP		HERITAGE RD /MYRA RD					6.73	11/04/2016	15:56	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	Entering Roundabout	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - both moving - rear-end	Going Straight Ahead	Slowing	West	Northwest	West	Northwest	Follow Too Closely		Driver Not Distracted		Lane 1 Increasing Milepost
State Route	Walla Walla	Walla Walla	125SP125SP		HERITAGE RD /MYRA RD					6.73	08/15/2017	14:11	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	Entering Roundabout	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Merging (Entering Traffic)	Other*	West	East	North	South	Inattention	Did Not Grant RW to Vehicle	None		Lane 1 Decreasing Milepost
State Route	Walla Walla	Walla Walla	125SP125SP		HERITAGE RD /MYRA RD					6.73	05/11/2018	07:45	No Apparent Injury	Truck (Flatbad,Van,etc)	Pickup,Panel Truck or Vanette under 10,000 lb	Entering Roundabout	Raining	Wet	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead	South	North	West	East	Did Not Grant RW to Vehicle		None		Increasing Other Location
State Route	Walla Walla	Walla Walla	125SP125SP		HERITAGE RD /MYRA RD					6.73	07/02/2018	11:57	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	Entering Roundabout	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - both moving - sideswipe	Going Straight Ahead	Going Straight Ahead	South	East	West	East	None		None		Lane 1 Decreasing Milepost
State Route	Walla Walla	Walla Walla	125SP125SP		HERITAGE RD /MYRA RD					6.73	12/18/2018	12:06	No Apparent Injury	Passenger Car	Passenger Car	Entering Roundabout	Raining	Wet	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead	North	Northwest	East	West	Inattention		None		Lane 1 Decreasing Milepost
State Route	Walla Walla	Walla Walla	125		PINE ST					5.77	10/16/2015	19:35	No Apparent Injury	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	Entering at angle	Going Straight Ahead	Going Straight Ahead	South	North	East	West	Disregard Stop Sign - Flashing Red		Driver Not Distracted		Lane 1 Increasing Milepost
State Route	Walla Walla	Walla Walla	125		PINE ST					5.77	11/24/2015	23:00	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Raining	Wet	Dark-Street Lights On	Entering at angle	Slowing	Going Straight Ahead	South	North	East	West	Disregard Stop Sign - Flashing Red		None		Lane 1 Increasing Milepost
State Route	Walla Walla	Walla Walla	125		PINE ST					5.77	06/03/2017	08:52	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead	North	South	East	West	Did Not Grant RW to Vehicle		None		Lane 1 Increasing Milepost
City Street	Walla Walla	College Place	NE ROSE ST	800	NE LAMBERT AVE						06/06/2016	16:28	Possible Injury	Passenger Car	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Starting in Traffic Lane	East	West	North	South	None		Did Not Grant RW to Vehicle		Lane of Primary Trafficway
City Street	Walla Walla	College Place	WALLULA AVE	0	NE ROSE ST						09/11/2015	13:14	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb		At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Railway Crossing Gate	Stopped for Traffic		North	South			Unknown Driver Distraction				Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	NE MYRA RD	500	W ROSE ST						05/05/2015	17:18	Possible Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	North	South	Vehicle Stopped	Vehicle Stopped	Operating Defective Equipment		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	NE MYRA RD	500	W ROSE ST						05/05/2016	21:29	No Apparent Injury	Passenger Car	Passenger Car	At Intersection and Related	Raining	Wet	Dark-Street Lights On	From same direction - both going straight - one stopped - rear-end	Starting in Traffic Lane	Stopped at Signal or Stop Sign	North	South	Vehicle Stopped	Vehicle Stopped	Inattention		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	NE MYRA RD	0	W ROSE ST						11/22/2016	21:08	No Apparent Injury	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Fog or Smog or Smoke	Wet	Dark-Street Lights On	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	North	South	Vehicle Stopped	Vehicle Stopped	Under Influence of Alcohol		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	NE MYRA RD	0	W ROSE ST						02/11/2018	09:21	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead	East	West	South	North	Inattention	Driver Interacting with Passengers, Anim	None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	W ROSE ST	1600	NE MYRA RD						02/26/2015	09:42	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Truck Tractor & Semi-Trailer	At Intersection and Related	Overcast	Dry	Daylight	Entering at angle	Making Right Turn	Going Straight Ahead	East	North	South	North	Inattention		None		Intersecting Trafficway
City Street	Walla Walla	Walla Walla	W ROSE ST	1600	NE MYRA RD						10/25/2016	12:12	Possible Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	East	West	Vehicle Stopped	Vehicle Stopped	Inattention		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	W ROSE ST	0	NE MYRA RD						12/11/2017	07:54	No Apparent Injury	Passenger Car	Passenger Car	At Intersection and Related	Overcast	Dry	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead	South	North	West	East	Disregard Stop and Go Light		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	W ROSE ST	1500		55	F	W	OFFNER RD		07/20/2018	23:00	Possible Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Driveway	Clear or Partly Cloudy	Dry	Dark-Street Lights On	From same direction - one right turn - one straight	Making Right Turn	Going Straight Ahead	West	South	West	East	Improper Turn	Inattention	None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	W ROSE ST	1500		34	F	W	OFFNER RD		10/01/2019	08:16	No Apparent Injury	Passenger Car	School Bus	Not at Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - both moving - rear-end	Going Straight Ahead	Slowing	East	West	East	West	Follow Too Closely		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	W ROSE ST	1400	OFFNER RD						03/01/2015	17:51	Possible Injury	Pickup,Panel Truck or Vanette under 10,000 lb		At Intersection and Related	Clear or Partly Cloudy	Dry	Dusk	Vehicle going straight hits pedestrian	Going Straight Ahead		West	East			None			Inattention	Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	W ROSE ST	1400	OFFNER RD						08/29/2015	11:29	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead	West	North	East	West	Did Not Grant RW to Vehicle		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	W ROSE ST	0	OFFNER RD						03/17/2017	21:16	No Apparent Injury	Passenger Car		At Intersection and Related	Raining	Wet	Dark-Street Lights On	Utility Pole	Making Left Turn		North	East			Had Taken Medication				Past the Outside Shoulder of Primary Trafficway
City Street	Walla Walla	Walla Walla	AVERY ST	0	W ROSE ST						02/10/2017	13:04	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Overcast	Wet	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	South	North	Vehicle Stopped	Vehicle Stopped	Inattention		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	AVERY ST	0	W ROSE ST						06/27/2017	10:36	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Slowing	Going Straight Ahead	South	North	West	East	None		Inattention		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	W ROSE ST	1400	AVERY ST						12/29/2015	16:08	Possible Injury	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Overcast	Dry	Dusk	Entering at angle	Making Right Turn	Going Straight Ahead	East	North	East	West	Improper Turn	Inattention	None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	W ROSE ST	1400	AVERY ST						05/28/2016	08:38	Possible Injury	Passenger Car	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Making Left Turn	Going Straight Ahead	South	West	East	West	Inattention		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	W ROSE ST	0	AVERY ST						02/07/2017	13:18	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Snowing	Ice	Daylight	Entering at angle	Making Right Turn	Stopped at Signal or Stop Sign	West	South	Vehicle Stopped	Vehicle Stopped	None		None		Intersecting Trafficway
City Street	Walla Walla	Walla Walla	W ROSE ST	0	AVERY ST						02/08/2017	11:55	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Sleet or Hail or Freezing Rain	Snow/Slush	Daylight	From same direction - one left turn - one straight	Overtaking and Passing	Making Left Turn	East	West	East	West	On Wrong Side Of Road		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	W ROSE ST	0	AVERY ST						11/16/2017	11:32	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead	East	South	West	East	Did Not Grant RW to Vehicle		None		Lane of Primary Trafficway
State Route	Walla Walla	Walla Walla	125		ROSE ST					5.41	01/12/2015	12:09	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Overcast	Wet	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	East	West	Vehicle Stopped	Vehicle Stopped	Follow Too Closely		None		Intersecting Road Increasing Milepost
State Route	Walla Walla	Walla Walla	125		ROSE ST					5.41	04/16/2015	10:35	No Apparent Injury	Truck (Flatbad,Van,etc)	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - both moving - sideswipe	Changing Lanes	Going Straight Ahead	North	South	North	South	Inattention		None		Left Turn Lane Decreasing Milepost
State Route	Walla Walla	Walla Walla	125		ROSE ST					5.41	07/06/2015	21:16	Suspected Serious Injury	Pickup,Panel Truck or Vanette under 10,000 lb		At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	Vehicle going straight hits pedestrian	Slowing		West	East			None			Inattention	Intersecting Road Decreasing Milepost
State Route	Walla Walla	Walla Walla	125		ROSE ST					5.41	12/01/2015	09:18	No Apparent Injury	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Stopped for Traffic	Starting in Traffic Lane	East	West	East	West	None		Inattention		Lane 2 Increasing Milepost
State Route	Walla Walla	Walla Walla	125		ROSE ST					5.41	03/30/2016	20:08	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Not Stated	At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	From opposite direction - one left turn - one straight	Going Straight Ahead	Making Left Turn	South	North	North	East	None		Other		Lane 2 Increasing Milepost
State Route	Walla Walla	Walla Walla	125		ROSE ST					5.41	06/24/2016	10:30	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	Northwest	Southeast	Northwest	Vehicle Stopped	Follow Too Closely		None		Lane 1 Decreasing Milepost
State Route	Walla Walla	Walla Walla	125		ROSE ST					5.41	10/17/2016	15:15	Suspected Minor Injury	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Raining	Wet	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead	South	North	West	East	Disregard Stop and Go Light	Inattention	None		Lane 1 Increasing Milepost
State Route	Walla Walla	Walla Walla	125		ROSE ST					5.41	11/28/2016	09:38	No Apparent Injury	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	North	South	North	Vehicle Stopped	Follow Too Closely		None		Lane 1 Decreasing Milepost
State Route	Walla Walla	Walla Walla	125		ROSE ST					5.41	01/09/2018	17:43	No Apparent Injury	Passenger Car	Passenger Car	At Intersection and Related	Raining	Wet	Dark-Street Lights On	From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead	South	West	North	South	Did Not Grant RW to Vehicle		None		Lane 2 Decreasing Milepost
State Route	Walla Walla	Walla Walla	125		ROSE ST					5.41	02/05/2018	21:23	Suspected Serious Injury	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	From same direction - both going straight - one stopped - sideswipe	Going Straight Ahead	Stopped at Signal or Stop Sign	East	West	Vehicle Stopped	Vehicle Stopped	Exceeding Stated Speed Limit		None		Intersecting Road Increasing Milepost
State Route	Walla Walla	Walla Walla	125		ROSE ST					5.41	03/13/2018	21:05	Possible Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Raining	Wet	Dark-Street Lights On	From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead	South	West	North	South	Did Not Grant RW to Vehicle		None		Lane 1 Decreasing Milepost
State Route	Walla Walla	Walla Walla	125		ROSE ST					5.41	04/01/2018	13:57	No Apparent Injury	Not Stated	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead	South	North	West	East	Disregard Stop and Go Light		None		Lane 1 Increasing Milepost
State Route	Walla Walla	Walla Walla	125		ROSE ST					5.41	06/25/2018	17:44	No Apparent Injury	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-No Street Lights	Entering at angle	Going Straight Ahead	Going Straight Ahead	South	North	East	West	None		Inattention		Lane 1 Increasing Milepost
State Route	Walla Walla	Walla Walla	125		ROSE ST					5.41	01/21/2019	18:07	Possible Injury	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	From same direction - both going straight - one stopped - rear-end	Starting in Traffic Lane	Stopped at Signal or Stop Sign	West	East	Vehicle Stopped	Vehicle Stopped	Inattention		None		Intersecting Road Decreasing Milepost
State Route	Walla Walla	Walla Walla	125		ROSE ST					5.41	02/02/2019	04:20	Unknown	Passenger Car		At Intersection and Not Related	Raining	Wet	Dark-Street Lights On	Tree or Stump (stationary)	Making Right Turn		West	East			Under Influence of Alcohol	Exceeding Stated Speed Limit			Past Right Shoulder Increasing Milepost
State Route	Walla Walla	Walla Walla	125		ROSE ST					5.41	02/11/2019	15:45	No Apparent Injury	Passenger Car	Passenger Car	At Intersection and Related	Snowing	Ice	Daylight	From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead	East	South	West	East	Did Not Grant RW to Vehicle		None		Lane 1 Decreasing Milepost
State Route	Walla Walla	Walla Walla	125		ROSE ST					5.41	09/20/2019	10:47	No Apparent Injury	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Making Left Turn	Making Left Turn	South	Northwest	East	Southwest	Inattention		Inattention		Left Turn Lane Increasing Milepost
State Route	Walla Walla	Walla Walla	125		ROSE ST					5.41	09/22/2019	16:28	Possible Injury	Pickup,Panel Truck or Vanette under 10,000 lb		At Intersection and Related	Raining	Wet	Daylight	Vehicle turning left hits pedestrian	Making Left Turn		South	West			Fail to Yield Row to Pedestrian			None	Intersecting Road Decreasing Milepost
City Street	Walla Walla	College Place	NE C ST	1100		50	F	W	NE MYRA RD		05/29/2019	12:39	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	Intersection Related but Not at Intersec	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Starting in Traffic Lane	Stopped at Signal or Stop Sign	West	East	Vehicle Stopped	Vehicle Stopped	Inattention		None		Lane of Primary Trafficway
City Street	Walla Walla	College Place	NE C ST	1100	NE MYRA RD						06/25/2019	11:00	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Same direction -- both turning right -- one stopped -- rear end	Making Right Turn	Stopped for Traffic	North	West	North	West	Other		None		Lane of Primary Trafficway
City Street	Walla Walla	College Place	NE MYRA RD	1000	NE C ST						06/14/2018	11:50	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Same direction -- both turning right -- one stopped -- rear end	Making Right Turn	Making Right Turn	North	West	North	West	Inattention		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	NE C ST	0	NE MYRA RD						10/04/2017	17:37	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	West	East	Vehicle Stopped	Vehicle Stopped	Follow Too Closely		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	NE C ST	0	NE MYRA RD						05/22/2018	16:01	No Apparent Injury	Passenger Car	Truck (Flatbad,Van,etc)	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead	West	East	North	South	Did Not Grant RW to Vehicle		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	NE MYRA RD	300		40	F	SE	W POPLAR ST		10/07/2018	17:01	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	Intersection Related but Not at Intersec	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped for Traffic	South	North	Vehicle Stopped	Vehicle Stopped	Follow Too Closely		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	NE MYRA RD	300		120	F	SE	W POPLAR ST		02/25/2019	16:51	Possible Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	Intersection Related but Not at Intersec	Snowing	Ice	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	South	North	Vehicle Stopped	Vehicle Stopped	Inattention	Exceeding Reas. Safe Speed	None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	NE MYRA RD		NE C ST						03/03/2015	13:24	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Same direction -- both turning right -- both moving -- rear end	Making Right Turn	Making Right Turn	North	West	North	West	None		Inattention		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	NE MYRA RD		W POPLAR ST						08/01/2015	19:23	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead	West	East	South	North	Disregard Stop and Go Light		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	NE MYRA RD	0	W POPLAR ST						12/12/2016	12:05	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Snowing	Ice	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	South	North	Vehicle Stopped	Vehicle Stopped	Exceeding Reas. Safe Speed		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	NE MYRA RD	0	W POPLAR ST						01/13/2017	10:10	Unknown	Pickup,Panel Truck or Vanette under 10,000 lb	Truck (Flatbad,Van,etc)	At Intersection and Related	Clear or Partly Cloudy	Ice	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	South	North	South	North	Exceeding Reas. Safe Speed		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	NE MYRA RD	0	W POPLAR ST						01/15/2017	17:30	Unknown	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Ice	Dark-Street Lights On	From opposite direction - all others	Going Straight Ahead	Stopped at Signal or Stop Sign	South	North	Vehicle Stopped	Vehicle Stopped	Exceeding Reas. Safe Speed		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	NE MYRA RD	0	W POPLAR ST						01/23/2017	07:22	No Apparent Injury	Truck (Flatbad,Van,etc)	Passenger Car	At Intersection and Related	Fog or Smog or Smoke	Ice	Dawn	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped for Traffic	North	South	Vehicle Stopped	Vehicle Stopped	Exceeding Reas. Safe Speed		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	NE MYRA RD	0	W POPLAR ST						03/15/2017	17:04	Unknown	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Raining	Wet	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead	West	East	North	South	Inattention		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	NE MYRA RD	0	W POPLAR ST						02/14/2018	18:05	Possible Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Wet	Dark-Street Lights On	From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead	North	East	South	North	Under Influence of Alcohol	Did Not Grant RW to Vehicle	None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	NE MYRA RD	0	W POPLAR ST						09/10/2018	15:07	No Apparent Injury	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead	North	South	East	West	Disregard Stop and Go Light	Inattention	None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	NE MYRA RD	0	W POPLAR ST						11/07/2019	18:25	No Apparent Injury	Passenger Car	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	South	North	Vehicle Stopped	Vehicle Stopped	Apparently Fatigued		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	W POPLAR ST	1500	NE MYRA RD						02/26/2015	16:24	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Bus or Motor Stage	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - both moving - rear-end	Going Straight Ahead	Going Straight Ahead	East	West	East	West	Inattention		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	W POPLAR ST	1500	NE MYRA RD						10/01/2015	08:31	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Stopped at Signal or Stop Sign	Slowing	Vehicle Stopped	Vehicle Stopped	East	South	None		Inattention		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	W POPLAR ST	1500	NE MYRA RD						12/02/2015	11:23	Unknown	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Sleet or Hail or Freezing Rain	Ice	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped for Traffic	East	West	Vehicle Stopped	Vehicle Stopped	Follow Too Closely		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	W POPLAR ST	1500	NE MYRA RD						12/02/2015	12:46	No Apparent Injury	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Overcast	Ice	Daylight	From same direction - both going straight - one stopped - sideswipe	Going Straight Ahead	Stopped for Traffic	West	East	Vehicle Stopped	Vehicle Stopped	Other		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	W POPLAR ST	0	NE MYRA RD						11/28/2016	13:38	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb		At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Vehicle - Pedalcyclist	Going Straight Ahead		East	West			None				Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	W POPLAR ST	0	NE MYRA RD						12/14/2016	14:38	No Apparent Injury	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Overcast	Ice	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped for Traffic	East	West	East	Vehicle Stopped	Exceeding Reas. Safe Speed		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	W POPLAR ST	0	NE MYRA RD						01/12/2017	13:09	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Ice	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	East	West	Vehicle Stopped	Vehicle Stopped	Exceeding Reas. Safe Speed		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	W POPLAR ST	0	NE MYRA RD						12/13/2016	16:41	No Apparent Injury	Passenger Car	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Ice	Dark-Street Lights On	From same direction - both going straight - one stopped - rear-end	Slowing	Stopped for Traffic	East	West	East	Vehicle Stopped	Follow Too Closely		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	W POPLAR ST	0	NE MYRA RD						11/09/2018	17:40	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	East	West	Vehicle Stopped	Vehicle Stopped	Inattention		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	NE MYRA RD	200	E WHITMAN DR						11/08/2016	11:00	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Stopped at Signal or Stop Sign	Going Straight Ahead	Vehicle Stopped	Vehicle Stopped	South	West	None		Inattention		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	DALLES MILITARY RD	1800	SE MYRA RD						08/26/2016	09:18	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Stopped at Signal or Stop Sign	Going Straight Ahead	Vehicle Stopped	Vehicle Stopped	West	East	None		Inattention		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	DALLES MILITARY RD	0	SE MYRA RD						12/24/2016	23:24	No Apparent Injury	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Snowing	Snow/Slush	Dark-Street Lights On	From same direction - both going straight - both moving - rear-end	Making Right Turn	Going Straight Ahead	North	West	East	West	Did Not Grant RW to Vehicle		Inattention		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	DALLES MILITARY RD	0	SE MYRA RD						01/24/2018	20:09	Suspected Minor Injury	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Raining	Dry	Dark-Street Lights On	From opposite direction - one left turn - one right turn	Making Right Turn	Making Left Turn	East	North	West	North	Did Not Grant RW to Vehicle		None		Intersecting Trafficway
City Street	Walla Walla	Walla Walla	DALLES MILITARY RD	0	SE MYRA RD						05/22/2018	10:06	No Apparent Injury	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Making Right Turn	Going Straight Ahead	West	South	North	South	Did Not Grant RW to Vehicle		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	SE 12TH ST	1200	SE MYRA RD						05/25/2015	11:56	No Apparent Injury	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Slowing	Stopped in Roadway	West	East	Vehicle Stopped	Vehicle Stopped	Other		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	SE 12TH ST	1200	SE MYRA RD						07/14/2016	12:01	Possible Injury	Passenger Car	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Slowing	Stopped at Signal or Stop Sign	West	East	West	Vehicle Stopped	Inattention		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	SE MYRA RD	300		64	F	NW	DALLES MILITARY RD		10/26/2017	17:16	No Apparent Injury	Passenger Car	Passenger Car	Intersection Related but Not at Intersec	Clear or Partly Cloudy	Dry	Dusk	From opposite direction - one left turn - one right turn	Making Right Turn	Making Left Turn	East	North	West	North	Improper Turn		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	SE MYRA RD		DALLES MILITARY RD						04/05/2016	13:25	Possible Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead	North	East	South	North	Did Not Grant RW to Vehicle		Driver Not Distracted		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	SE MYRA RD	0	DALLES MILITARY RD						12/02/2016	06:01	No Apparent Injury	Passenger Car		At Intersection and Not Related	Clear or Partly Cloudy	Wet	Dark-Street Lights On	Earth Bank or Ledge	Going Straight Ahead		North	South			Operating Defective Equipment				Past the Outside Shoulder of Primary Trafficway
City Street	Walla Walla	Walla Walla	SE MYRA RD	0	DALLES MILITARY RD						08/14/2017	22:00	Possible Injury	Motorcycle		At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	Miscellaneous Object or Debris on Road	Making Left Turn		North	East			None				Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	SE MYRA RD	0	DALLES MILITARY RD						10/08/2018	19:53	Possible Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Raining	Wet	Dark-Street Lights On	Entering at angle	Going Straight Ahead	Going Straight Ahead	East	West	South	North	Unknown Driver Distraction		Unknown Driver Distraction		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	SE MYRA RD	0	DALLES MILITARY RD						09/12/2019	13:04	Possible Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - both moving - rear-end	Going Straight Ahead	Slowing	North	Southeast	North	Southeast	Follow Too Closely		None		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	SE MYRA RD		SE 12TH ST						09/11/2015	07:15	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Making Right Turn	Going Straight Ahead	North	West	East	West	Inattention		Driver Not Distracted		Lane of Primary Trafficway
City Street	Walla Walla	Walla Walla	SE MYRA RD		SE 12TH ST						05/26/2016	14:00	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Making Left Turn	Going Straight Ahead	Southwest	North	Northwest	Southeast	Other		Other		Lane of Primary Trafficway
State Route	Walla Walla	Walla Walla	125		MYRA RD					3.42	02/01/2015	19:50	No Apparent Injury	Passenger Car	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Wet	Dark-Street Lights On	From same direction - both going straight - one stopped - rear-end	Changing Lanes	Stopped at Signal or Stop Sign	South	North	Vehicle Stopped	Vehicle Stopped	Under Influence of Alcohol		None		Left Turn Lane Increasing Milepost
State Route	Walla Walla	Walla Walla	125		MYRA RD					3.42	01/19/2015	10:18	Possible Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From opposite direction - one left turn - one straight	Going Straight Ahead	Making Left Turn	North	South	North	East	Disregard Stop and Go Light		None		Lane 2 Decreasing Milepost
State Route	Walla Walla	Walla Walla	125		MYRA RD					3.42	03/25/2015	17:45	No Apparent Injury	Passenger Car	Passenger Car	At Intersection and Related	Raining	Wet	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	South	North	South	Vehicle Stopped	Inattention	Follow Too Closely	None		Lane 2 Increasing Milepost
State Route	Walla Walla	Walla Walla	125		MYRA RD					3.42	06/10/2015	16:20	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From opposite direction - all others	Making U-Turn	Going Straight Ahead	North	North	South	North	Improper U-Turn		None		Lane 1 Increasing Milepost
State Route	Walla Walla	Walla Walla	125		MYRA RD					3.42	07/18/2015	21:16	No Apparent Injury	Passenger Car		At Intersection and Not Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	Vehicle Strikes Deer	Going Straight Ahead		South	North			None				Lane 2 Increasing Milepost
State Route	Walla Walla	Walla Walla	125		MYRA RD					3.42	12/19/2015	17:28	No Apparent Injury	Passenger Car	Passenger Car	At Intersection and Related	Other	Wet	Dark-Street Lights On	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	North	South	Vehicle Stopped	Vehicle Stopped	Inattention		None		Lane 2 Decreasing Milepost
State Route	Walla Walla	Walla Walla	125		MYRA RD					3.42	06/01/2016	07:59	No Apparent Injury	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From opposite direction - one left turn - one straight	Going Straight Ahead	Making Left Turn	North	South	South	West	Disregard Stop and Go Light	Inattention	None		Lane 1 Decreasing Milepost
State Route	Walla Walla	Walla Walla	125		MYRA RD					3.42	07/11/2016	21:50	No Apparent Injury	Passenger Car	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	South	North	Vehicle Stopped	Vehicle Stopped	Inattention		None		Lane 2 Increasing Milepost
State Route	Walla Walla	Walla Walla	125		MYRA RD					3.42	11/03/2016	11:03	No Apparent Injury	Truck Tractor & Semi-Trailer	Truck - Double Trailer Combinations	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Same direction -- both turning right -- both moving -- sideswipe	Making Right Turn	Making Right Turn	West	South	West	South	Other		Other		Lane 1 Decreasing Milepost
State Route	Walla Walla	Walla Walla	125		MYRA RD					3.42	11/30/2016	16:05	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Not Related	Clear or Partly Cloudy	Dry	Dusk	From same direction - both going straight - both moving - sideswipe	Changing Lanes	Going Straight Ahead	North	South	North	South	Inattention		None		Lane 1 Decreasing Milepost
State Route	Walla Walla	Walla Walla	125		MYRA RD					3.42	01/29/2017	14:55	No Apparent Injury	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	South	North	Vehicle Stopped	Vehicle Stopped	Under Influence of Alcohol	Inattention	None		Left Turn Lane Increasing Milepost
State Route	Walla Walla	Walla Walla	125		MYRA RD					3.42	03/20/2017	17:01	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	North	West	Vehicle Stopped	Vehicle Stopped	Follow Too Closely		None		Intersecting Road Decreasing Milepost
State Route	Walla Walla	Walla Walla	125		MYRA RD					3.42	04/29/2017	03:00	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb		At Intersection and Not Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	Vehicle Strikes Deer	Going Straight Ahead		South	North			None				Lane 1 Increasing Milepost
State Route	Walla Walla	Walla Walla	125		MYRA RD					3.42	07/07/2017	11:41	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - both moving - sideswipe	Going Straight Ahead	Going Straight Ahead	North	South	South	North	None		None		Lane 2 Decreasing Milepost
State Route	Walla Walla	Walla Walla	125		MYRA RD					3.42	07/12/2017	16:44	No Apparent Injury	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Making Right Turn	North	South	West	South	Disregard Stop and Go Light	Inattention	None		Lane 1 Decreasing Milepost
State Route	Walla Walla	Walla Walla	125		MYRA RD					3.42	09/07/2017	12:39	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Fog or Smog or Smoke	Dry	Daylight	Same direction -- both turning right -- both moving -- rear end	Making Right Turn	Making Right Turn	West	South	West	South	Inattention	Follow Too Closely	None		Intersecting Road Decreasing Milepost
State Route	Walla Walla	Walla Walla	125		MYRA RD					3.42	06/06/2018	18:27	No Apparent Injury	Passenger Car	Passenger Car	At Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - both moving - sideswipe	Changing Lanes	Going Straight Ahead	North	South	North	South	Other Driver Distractions Inside Vehicle	Did Not Grant RW to Vehicle	None		Lane 2 Decreasing Milepost
State Route	Walla Walla	Walla Walla	125		MYRA RD					3.42	10/23/2018	01:36	No Apparent Injury	Passenger Car		At Intersection and Not Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	Vehicle Strikes Deer	Going Straight Ahead		West	East			None				Lane 1 Increasing Milepost
State Route	Walla Walla	Walla Walla	125		MYRA RD					3.42	10/27/2018	08:59	No Apparent Injury	Passenger Car		At Intersection and Related	Clear or Partly Cloudy	Wet	Daylight	Crash Cushions - Impact Attenuators	Making Left Turn		South	West			Inattention				Median Shoulder Increasing Milepost
State Route	Walla Walla	Walla Walla	125		MYRA RD					3.42	11/14/2018	22:20	Possible Injury	Passenger Car	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	South	North	Vehicle Stopped	Vehicle Stopped	Inattention	Follow Too Closely	None		Lane 1 Increasing Milepost
State Route	Walla Walla	Walla Walla	125		MYRA RD					3.42	06/11/2019	15:00	Possible Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped for Traffic	North	South	Vehicle Stopped	Vehicle Stopped	Driver Distractions Outside Vehicle	Follow Too Closely	None		Intersecting Road Decreasing Milepost
State Route	Walla Walla	Walla Walla	125		MYRA RD					3.42	07/31/2019	07:00	No Apparent Injury	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight	From opposite direction - all others	Making U-Turn	Going Straight Ahead	North	North	South	North	Improper U-Turn	Did Not Grant RW to Vehicle	None		Lane 2 Increasing Milepost